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HASTE MAKES WASTE.



Trying to put a Gallon Measure of Work into a Pint Cup of Time!



A SURVEY FROM WITHIN

William T. Miller, Roslindale, Mass.



One result of the application of scientific principles to the business of education has been the use of the survey to determine the efficiency and needs of educational systems. The survey as applied to a school system is an examination more or less minute and searching, by a person or persons supposedly expert and unbiased. There are two classes of surveys: the general, taking in everything in the system, from all points of view; and the special, taking in only one part of the system, or viewing the whole system from one standpoint. Thus the manual training work of the schools may be examined very carefully, as to its objects, methods, attainments, expense, etc. That would be a special survey. Again, the whole school system might be examined from the standpoint of expense, with the sole view of determining whether more economy should be practiced, or whether on the other hand a larger expenditure would be beneficial. A special survey, again.

The general survey, taking a whole system from all points of view, is a rare and difficult undertaking, and unless very thoroly and wisely done, is likely to be of doubtful value.

In any case, one of the greatest difficulties in any kind of a survey is to secure an individual or a committee at once capable, unbiased, and willing to conduct the investigation. For a general survey of a large school system, at least three types of expert ability are required: pedagogical, architectural, and commercial. Such a survey is often very expensive, and sometimes quite unsatisfactory. Leaving aside the question of expense, the principal difficulty with surveys by imported experts is the impression among the rank and file of the teachers that these "outsiders" are unfamiliar with the traditions of the community and the peculiarities of the system. They lack the background of experience with the machine upon which they attempt to pass judgment. However well or ill founded this criticism may be in concrete cases, it does seem plausible to set down as a desirable qualification in an investigator that he should be acquainted with the traditions and environment of the system he is examining. To make possible an unbiased survey with this background of personal experience in the system surveyed, is the object of the plan here presented.

In the first place, any sensible survey has some definite object in view, which object should be perfectly understood by those engaged in the survey. This should be made clear by the individual or body authorizing the survey. There should also be a definite time limit, generous but explicit, and strictly adhered to, unless unforeseen difficulties arise. All of these cautions apply to any type of survey; the new feature of this plan is that those making the survey are persons actually engaged in administering or teaching in the system they are examining.

Briefly, the survey is carried on by committees representing different parts of the system. The

number of these committees varies of course with the varying organizations and size of the different systems. The simplest division of committees for a very small city would be:

I. *Elementary School Committee*, including one principal, one primary teacher, and one grammar school teacher.

II. *High School Committee*, including two teachers, and one principal.

III. *Administrative Committee*, including the superintendent, a supervisor, and a clerk or other business official.

Larger cities, with greater numbers and more complexities in their school systems, would need more numerous and diversified committees, but for the great majority of cities, those between 10,000 and 100,000 population, four committees would suffice, divided perhaps as follows:

I. *Teachers' Committee*, including one primary, one grammar school, and one high school teacher.

II. *Principals' Committee*, including two elementary, and one high school principal.

III. *Special Subjects' Committee*, including three directors, supervisors, or teachers of special subjects.

IV. *Officials' Committee*, including three officials representing the educational, business, and architectural phases of school administration.

Each committee, as said, investigates its own line of work. The scope of the four committees outlined above would divide itself somewhat as follows:

I. The primary, grammar, and high school teachers cover their respective portions of the classroom work of the city.

II. One elementary principal covers supervision of teaching and discipline, equipment and supplies in elementary schools, one covers buildings, size and boundaries of districts. The high school principal does the same for high schools.

III. The teachers, directors, or supervisors of special subjects, such as music, drawing, manual training, domestic science, penmanship, etc., cover their respective subjects.

IV. The Officials' Committee will vary widely, but may include the superintendent, covering matter of executive policy, a purchasing agent, covering contracts and other like matters, a clerk, secretary, or accountant, covering the business routine of the schools, or perhaps a janitor, engineer, or other official connected with the mechanical affairs of the system.

The committees and their division of authority will also differ with the specific purpose of the survey, but the plan here outlined is for a general inspection of the whole system. For a large and complex system, taking Boston as an example, there might be the following committees:

I. Three elementary teachers—kindergarten, primary, grammar.

II. Three submasters.

III. Three elementary masters.

IV. Three high school teachers.

V. Three high school headmasters.

VI. Three supervisors—music, drawing, assistant superintendent, etc.

VII. Three officials—business agent, secretary, schoolhouse custodian, etc.

Each of the committees in the survey is to investigate its own part of the system, keeping the specific aim of the work always in mind. They should be given a certain amount of time off without loss of pay, to pursue their investigations, altho the completion of their work might well necessitate their giving up much of their otherwise free time. Each member might have ten free days, taken when most convenient or valuable. The only cost to the city is for substitute service, and for some clerical assistance needed by the committees in preparing their reports. Of course in the small city there would be fewer committees, less time required, greater thoroughness possible, and less expense incurred.

At first thought, this committee system might seem to make for very narrow and biased reports, but several factors prevent this result. In the first place, the committees are carefully chosen, with a view to securing thoroly judicial, careful, and scrupulously honest representatives of each branch of the service. In the second place, the placing of three persons on each committee, each representing a different section of that branch of the service, acts as a deterrent on any exaggeration or misrepresentation. Each member of the committee exerts a checking influence on each other member. But the third and most effective means of making the survey unprejudiced is the committee of the whole. This consists of the chairmen of the special committees, with the superintendent as an ex-officio member. To this committee of the whole each chairman must present the report of his committee. Any obscure or objectionable statements must be explained to the satisfaction of the committee of the whole, and this committee has the power of voting anything in or out of any individual committee report. Thus every branch of the system interacts on every other branch, which ought to result in absolutely disinterested conclusions. The committee of the whole also has power to make a general report on any question touching the system as a whole. The superintendent is made a member of this committee principally to keep in mind this unity of the whole system. He above all others should be able to see all parts of the system in their proper perspective. The final report of the committee of the whole is made to the authority which initiated the survey.

This method of survey from within has the advantage of great flexibility. The same method may be applied to one particular part of a system, or to a limited aspect of the whole system.

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THE HIGH SCHOOL PRINCIPAL

The Man, His Duties and Opportunities Within the School and Outside of It

Orwin Bradford Griffin, High School, Portsmouth N. H.

The principalship of an American high school is one of the greatest educational offices in the school system. No other office calls for higher qualities of personal character and worth or is fraught with heavier responsibilities or more satisfactory opportunities for doing good. The principal in his relations with pupils and parents, teachers, superintendent and school board, touches the life of a whole community as no other official can.

Despite all this there is comparative absence in periodicals of administration of discussion concerning the office of principal. Apparently, in the examinations of superintendents and school boards on the one hand, and of teachers on the other, the principalship has been neglected. Even in educational surveys, so prevalent now, "one is struck by the slight attention that is paid in the surveys to the need of care in the selection of principals."¹

Qualifications of the Principal.

Leadership. Inherent in the office itself is the first quality which we naturally seek in the high school principal, namely, leadership or executive ability. Not only because he is to have in charge boys and girls in a plastic period of their development and in the last stage of their education, but because he is also in the forefront with the best minds of a community, have we a right to expect in him marked ability as a leader. The principal is at liberty to be as big a man as he can. The only restriction is that he shall work in perfect harmony with the superintendent. We mean by executive ability the power to lead, train, direct, and control people, power to make a "go" of things, the power of achievement. The principal must be capable of guiding the pupils, teachers, and community, to the best means of individual self-realization, of helping them to the purest, highest forms of social relationship. His should be a quiet, unobtrusive leadership. It is inspirational leadership which we desire in our high school principal.

Wide knowledge. The second qualification of the high school principal is insight into the great aspects of human culture. If any man is to be a leader to the noblest relationships of life, he must possess wide knowledge, scholarly attainments in the field of human culture, such as is gained by training in liberal arts, university study, wide travel and observation. The principal should be familiar, for instance, with fundamental facts and principles in these five divisions of learning: (1) biology: the study of plant and animal life; study of the structure, functions, and care of the human body; (2) astronomy, mathematics, chemistry, and physics; (3) epistemology, theism, ethics, psychology, logic; (4) literature and art; (5) history, anthropology.

Professional training. Beside this broad, general knowledge, the high school principal should have, for a third qualification, intensive acquaintance with the science of pedagogy. The principal has been variously described as "a teacher of teachers" and "a specialist in specialties." He must, first, be informed in the subject of secondary education. Especially it behooves him thoroly to understand the new high school problems which are today pressing upon our attention, such as, the junior high school, the junior college, the tendencies toward greater socialization of the high school and toward better adjustment of the curriculum to meet community needs. Then, too, the principal has need to know the justification for each subject taught, so that in the balancing of departments, no

department will receive undue nor inadequate recognition. He must, further, be familiar with general method and special methods—must know, too, the best books in education.

Understanding of child nature. The principal's immediate business is dealing with pupils. A most necessary endowment, therefore, for him is a keen appreciation of child nature. In the high school today are boys and girls from twelve (if we include the junior high school) to eighteen years of age. It is imperative that the principal be awake to the significance of this period in the lives of the pupils. Constant observation and study of the psychology of adolescence must be undertaken by him. For this study there is a large amount of helpful literature.

Understanding of human nature. Apart from his special study of child psychology, the principal has need of deep understanding of human nature. In this "delicate web of human contact and sympathy" in which he finds himself, he must be able to act without tearing any fine strands of the web. Especially must he be tactful, having qualities of a diplomat, so that he can get on pleasantly not only with pupils and colleagues, but also with parents and businessmen of the community. It is desirable that he be able to put himself in the place of others, as when parents come to him about their children. The principal must be sympathetic, judiciously sympathetic.

Teaching skill. Teaching skill I would place among the essential qualifications of the high school principal. Rarely perhaps does it happen that the man elected to the principalship has no teaching experience. There is a tendency sometimes, however, for him to drop actual classroom teaching to devote his whole energy to administration and supervision. "I think it is a mistake," Mr. Collar once said, "for a man who has been promoted to a headmastership of large responsibility because of his reputation as a superb teacher, to cease to teach and to become a mere administrator."² The principal should be constantly improving his teaching skill. He should, as suggested by one of James's laws of habit, "keep it alive by a little judicious exercise every day." This is practicable even in large high schools. Mr. Tetlow, who was principal over thirteen or fourteen hundred pupils of the Girls' High and Latin Schools, Boston, writes in the "Educational Review" (17:227) that he made a point of teaching at least eleven hours a week. It is necessary for the principal to have skill as a teacher, and actually to teach, if only to keep the point of view of the teachers and to understand the problems confronting them.

Strong, attractive personality. The high school principal's power to exert beneficial influence, especially over boys and girls in an impressible period of development, probably far surpasses that of the clergyman. A strong and attractive personality, therefore, is a highly desirable qualification of the principal. He must be neat in personal appearance. He should be of a kindly disposition, yet firmness and fairness will mark all his acts. He will have his own positive religious convictions, without being narrow or bigoted. He strengthens the moral character of boys and girls by the uprightness of his own life.

Capacity for growth. The crowning requisite of the high school principal is a capacity for growth. He must be alertly responsive to events transpiring outside of his immediate sphere of action. Without a disposition to keep abreast

of the times, alive to the merits of new ideas, he will fail as principal. Other qualifications will mean nothing. It is obvious that a man behind the times, a *laudator temporis acti*, is in no position to lead boys and girls or a community. It is a contradiction of terms to assert that a man not having this capacity for growth has wide knowledge. And so on down the list. A fog of a principal seldom appeals to boys and girls as possessed of an attractive personality. A quotation from Felix Arnold gives point to the discussion here: "As one of the approving agents of the school, the principal should keep in touch with present social, economic, and political conditions. Unless he has a broad basis to enable him to interpret clearly and appreciate rightly, his decisions will become narrow and partisan. Association with his colleagues in clubs, gatherings, the university, social contact with different classes of men in other fields, participation to some extent in the activities of the children—these will help to preserve in him humanity, to prevent crustiness, and to keep off the barren conventionalism of official routine."³ Furthermore, that he may keep in touch with advances in the field of education, the principal should read regularly the best educational periodicals.

The eight major qualifications given above do not exhaust the list of characteristics desirable in the principal. They seem, however, all to be really essential qualifications in view of the principal's duties and the opportunities which lie at his door.

The Principal's Duties.

The duties of the high school principal may be grouped conveniently as, official duties, duty to the school as a whole, duty to teachers, duty to individual pupils and parents, duty to the community.

Official duties. The principal's official duties are found in printed or written instructions of the superintendent and in the school board's rules and regulations. The principal is responsible to the superintendent and, thru him, to the board, for the intelligent and successful administration of the school.

Organization of the curriculum, in these days when reorganization is rife, is perhaps the most important official duty of the principal. With the junior high school at the lower end and the junior college above, the senior high school curriculum must be painstakingly organized for close articulation with the curricula of these other divisions of the system, especially with that of the junior high school.

The adjustment of work to the pupils, of pupils to work, and the assignment of classes to the teachers in such a way that no one of them shall be overburdened and that all may have as equal as possible a share in the work, are other essential official duties. It is the principal's business to direct all the internal workings of the school and "to stand for it before the patrons under the rules of the board as interpreted by the superintendent."⁴ He should suggest to the superintendent needful changes in rules, courses of study, and the teaching staff. The principal is curator of the high school building and grounds.

Duty to the whole school. It is the principal's duty so to administer the life of the school that harmony and unity will prevail thruout. He must exert a wholesome, invigorating, and uplifting influence on the teaching of the school. For the pupils as a body, his duty is to approve

¹Mr. Mahoney, Rpt. U. S. Comm. of Ed. I, 1914: 571.

²Quot. by Mr. Tetlow, Ed. Rev. 17: 227.

³School and Class Management, I. 39.

⁴Prof. Hollister, High School Administration: 110.

or direct their organizations, and to suggest high standards of attainment for all their activities. It is a function to secure the co-operation of the whole school in caring for the school grounds and in preserving the neat, attractive appearance of the building. The principal owes it to the whole school to maintain sanitary and hygienic conditions thruout the building.

Duty to teachers. The principal's first duty to the teachers is to apprise them carefully of official requirements pertaining to their positions. If reports are requested, the teachers should be given ample time for preparing them. In one school where I have taught, where a mania for "data" was loose, teachers were expected to be in their rooms by eight o'clock. Occasionally, sometime after eight o'clock, the principal posted a notice in the teacher's room to the effect that "the following data must be in my hands by one o'clock today." As I recall it, a ruling in the board's green book stated that no teacher should work on a report during school hours. It would seem that a principal was failing in his duty who did not afford teachers plenty of time for reports of this sort. One slip-up of this kind may have an extremely bad effect upon the relations between principal and teachers, and so affect the whole school.

So long as essential requirements are met, the principal should allow the teachers to develop their own theories. It is his duty to praise and encourage each teacher. If ever he deems it necessary to censure, his duty is to disapprove tactfully and in private. The young teacher comes to her first real school with fear and trembling. In dealing with one of this kind, the principal must be diplomatically, but positively helpful. The teachers appreciate it. "While teaching, the principal was my best friend," says one.⁵ The principal must preserve a just and proper balance between departments, with favoritism or partiality to none.

In cases of discipline, especially the "hard" cases, it is decidedly the principal's obligation to sustain the teacher to the utmost. "When he has occupied his position long enough to have established a reputation for prompt, just, efficient, and wise action, that very reputation will relieve him of many cases; for the certainty with which teachers and pupils alike can predict what his action will be tends of itself to prevent mild cases from becoming acute."⁶ The ultimate responsibility for good order in the school rests with the principal.

To censure or discredit a teacher before a pupil is extremely injudicious in a principal. The evil effects of such action are fairly obvious. The news spreads and forthwith that teacher's usefulness in the school is at an end. Or, if the teacher is popular, the principal suffers. Pupils quickly sense dissension among authorities, and such dissension breeds disorder and student strikes. So it is generally the principal's clear duty to go the farthest reasonable length in upholding the teacher. While visiting the teacher or talking to her before her classes, the principal should by his attitude convey to the pupils the impression that the teacher is supreme in her classroom.

Duty to pupils and to parents. Perhaps the principal's greatest obligation toward individual pupils is to give them a good start in life. Parents are more and more looking to the teachers to instruct their children even in the most intimate and sacred affairs of life. The principal should study the pupils' characters, discovering special bents, so as to advise successfully what career they may best enter. It very often happens that the principal must teach parents the best careers for their boys and girls. It is

pathetic how parents without the advantage of a good education often desire the best possible education for their children, but are not themselves able to advise. To perform this duty safely the principal must know the commercial, vocational, industrial openings. As much as possible he should give a distinct vocational trend to all courses of study, in fairness to the great majority who may never go to college. He must work hard to graduate from his school pupils with definite purposes and high ideals.

The principal should keep parents carefully informed of their children's health, conduct, and work. When pupils have lost their parents, or parents are separated, the principal's responsibility increases. He more than any other teacher, especially with boys, then stands in loco parentis, and he must advise, encourage, and guide, these unfortunate boys and girls.

Duty to the community. Together with the superintendent and board the principal is responsible to the taxpayers for "results." It is his duty to effect economical disbursement of the high school appropriation. Economy here does not mean parsimony. The school should have textbooks in good condition and maintain the highest possible grade of instruction.

I believe it a most essential obligation of the principal to keep the community at large regularly informed of the work and aims of the school. He ought to secure the co-operation of the local press for this purpose. An excellent thing would be to have a section in all local papers reserved as the official high school section. To it not only principal and teachers, but also pupils should contribute articles of general interest concerning the school's activities. It would be desirable for the editors to pay pupils regular rates for acceptable material, this high school section perhaps taking the place of a school paper. Advantages of such a plan are, that the co-operation of a powerful, outside in-

fluence is secured for the school, the community and the school and individual pupils personally come in closer contact with one another, pupils have a chance to earn a little money (which they will appreciate), and journalism will appear as a possible vocation for some of the boys and girls.

Finally, the principal's duty to the community is so to conduct its high school that the citizens may be justly proud of it when compared with other high schools. Outside of the school, it is the principal's supreme duty and privilege by his own example to place high standards of living before the community.

Opportunities of the Principal.

It is impossible in brief space to describe all the ways the high school principal has for doing good. As already said, the principal may be as big a man as he can. His capacity sets the limit. His duties are his privileges, open doors to countless opportunities.

Recently I asked a friend, "Why are you glad that you are a principal?"

"Because of the chance I have to influence boys and girls for the good things of life, to open up new vistas for them," he answered. "And," he added, "in the community where I am I have had the pleasure of helping organize a Parent-Teachers association and a civic club to study community needs."

My friend's answer indicates two great opportunities which lie at the principal's door: within the school, opportunity to set pupils on the right track; outside of the school, community service.

Within the school. The boys and girls of today, runs the truism, are the men and women of tomorrow. In the high school, under guidance of the principal, is a picked band of them, a large majority of whom never go to a higher school, but pass directly from high school into the world's work. The principal's opportunity is to pass on to these pupils the best lessons in the experience of this generation. The high school boys and girls are the leaders of the coming generation.

First, by his own unimpeachable conduct is the principal an example unto the boys and girls. By the neat ordering of his office and his care in adornment of the school, building and grounds, he inspires habits of neatness and love of beauty in the pupils. By his promptness, wholesomeness, fairness, judicious sympathy, enthusiasm, he will awaken like traits in the scholars.

The wise principal will endeavor to inculcate in each child a love of the out-of-doors. He must keep himself young, and implant in the hearts of his pupils perpetual youth, unwavering faith in the essential goodness of human beings, confidence that dares the impossible, determination to bear well their full part in the work of this world. By his life they will be taught that the Vision Splendid need not

"... die away,
And fade into the light of common day."

It is the principal's opportunity thus to create, and control the spiritual life of the school.

The capable principal will find many ways to realize this opportunity. One practical, effective means at his command may be specifically mentioned. This is the opening exercise. His great chance comes when all the pupils are assembled in the auditorium at the beginning of the school day when their minds are exceptionally receptive. "What he says or reads . . . if it bears the impress of a sound mind, a good heart, a disciplined will, and a consecrated spirit, cannot fail to make those who listen responsive to the high ideals which it embodies. Sometimes the incidents of school life will furnish the theme of a five-minute talk which, by interpreting concretely the true significance of personal

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A SCHOOL BOARD OF WOMEN

The three young women in the group above compose the school board of Manhattan District in Blaine County, Oklahoma. They are responsible as school directors for an excellent country school a few miles Southwest of Watonga. From left to right they are: Mrs. Laura Beals, clerk; Mrs. Rosa Beals, chairman; and Mrs. Maysell King. As a board they have completed one successful term of office and are starting on the second term.

⁵Olive Roberts Barton, Sch. Bd. Journal, Nov., 1914: 66.

⁶Mr. Tetlow, loc. cit.

FINANCIAL PRACTICES IN CITIES AND TOWNS BELOW TWENTY-FIVE THOUSAND

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I. Introductory.

The motive that prompted the preparation of this study was the discovery of the usual financial practices in the smaller cities and towns. The material of the study has been obtained thru personal interviews, from correspondence, questionnaire, and annual reports. As many illustrations, good and otherwise, found in actual use, as space permits will be presented. The material has been collected from a wide range, and we believe that much of it will be of service to superintendents and board members in case they are seeking such information as a means of improving their local practice. A technical, mathematical treatment has been strenuously avoided. No attempt has been made to put the results into such complicated shape as the well-known Strayer and Updegraff studies of city finances, mentioned later. It is hoped thus to sustain a live interest on the part of affected parties, often totally unfamiliar with the technique of statistics. The only technical terms used are "median" and "middle fifty per cent"; both are fully explained in connection with their mention. We have felt justified in making liberal quotations, believing that by judicious selection, we can give readers the gist of much material they could not otherwise secure without spending considerable time and trouble. Frequently statements and paragraphs can be presented best in the words of the authors.

This has proven a most interesting field for investigation. We do not claim to have done more than make a beginning. If we can arouse sufficient interest on the part of school administrators in these smaller cities and towns to induce them to start investigating, we shall have accomplished much. That there is undoubted room for great improvement, they know as well as we do. The chief difficulty lies in the dearth of usable material and the absence of a helping hand rather than in any obsession as to the infallibility of their best endeavors.

We shall attempt to present what material we have secured under the following outline:

I. Introductory:

1. Three studies of city finances:
 - a. Updegraff: cities over 30,000.
 - b. Strayer: 50,000 down to 10,000.
 - c. Deffenbaugh: 30,000 down to 2,500.
2. Need for study of financial practices in cities and towns below 25,000, and more particularly between 500 and 5,000.
3. Present unsatisfactory state of school business affairs in smaller cities and towns.
4. Reasons for this condition.

II. The School Budget:

1. The Mason definition.
2. Need for budgeting.
3. Legal provisions for.
4. Oregon budget law.
5. Provisions of Kentucky law.
6. Budget distribution:
 - a. Strayer Table 36.
 - b. Updegraff Table 103.
 - c. Deffenbaugh Tables 9 and 10.
7. Explanation of median and middle fifty per cent.
8. The school board and the budget.
9. The superintendent and the budget.
10. Variations from budget estimates.
11. Types of budgets:
 - a. Constructed along independent lines:
 - (1) Owensboro, Ky., budget.
 - (2) Montclair, N. J., budget.

Note—This article is the first section of a series discussing financial practices in smaller cities and villages. The author has been a student of the subject for a number of years.—Editor.

- b. In conformity with United States standard schedule:

- (1) A "standardized" budget, Ashland, Ore.

12. Need of uniformity.

III. School Accounting and Reporting:

1. Need for improvement.
2. Three criteria of reports.
3. Graphic presentation:
 - a. The Brinton Book:
 - (1) Nature of book.
 - (2) A checking list.
 - (3) Rules for.
4. Comparative costs within system:
 - a. Newport, Ky., report.
5. Business directors.
6. Publication of financial statements.
7. New accounting system of Minnesota:
 - a. Forms for High Schools.
8. Financial report of Providence, R. I.
9. Financial report of Newport, Ky.
10. Three brief statements of disbursements.
11. Need of uniformity:
 - a. United States standard schedule.
 - b. Explanatory material.

It seems rather strange, in view of the recent activity manifested in the discovery of problems for educational research, that no one has attempted, so far as the writer has been able to discover, any extended studies of the financial phases of school administration with reference to the cities and towns below 25,000, and more particularly with reference to the group between 500 and 5,000. We believe this has never been attempted, and that here is a particularly rich field for the student of school administration, and one that seriously needs attention. In these cities and towns financial matters are usually in a deplorably chaotic condition. The distributions are generally made in a haphazard manner. No knowledge is at hand to tell of general practices and tendencies, which are significant and corrective in nature. In short, there are at present no guide posts for the financial administration of the smaller school systems.

There have been, it is true, several very admirable technical studies made along this line of the large cities. Three very important studies may be mentioned. First, the pioneer study of its kind, made in 1905 by Dr. G. D. Strayer of Teachers College, Columbia University, entitled "City School Expenditures."¹ This work deals with a totally different group of cities from those studied by Dr. Updegraff. Dr. Strayer collected his data from 58 cities of between 10,000 and 50,000, located in Massachusetts, Rhode Island, Connecticut, New York and New Jersey. The Strayer study therefore has greater value for the small school system than the Updegraff study has. But it fails to reach the most numerous and therefore the most important group in this study, i. e., that between 500 and 5,000. The Strayer study is very technical in its manner of treatment, and consequently has much greater value to the trained than to the untrained administrator. The second study is entitled "A Study of Expenses of City School Systems"² by Dr. Harlan Updegraff, then Specialist in School Administration in the United States Bureau of Education. This work covers

103 cities of more than 30,000 population in 1910. It also is very technical in treatment, requiring considerable knowledge of the intricacies of statistical presentation to enable the reader to interpret it with any degree of profit and satisfaction. It was evidently prepared with the trained administrator in mind, rather than the lay reader, seeking legitimate information as to the financial condition of his school system. For the former it possesses great value; for the latter rather little. Unfortunately, the untrained, layman type of school official is enormously more numerous, and therefore enormously more important to consider than the trained man, if number involved has anything to do with relative importance. This latter type of official, however well-intentioned, is the man who is often in serious need of help because of his lack of training along this line. And the help that is to be of any substantial value to him must be given in such terms that he can comprehend and apply it unaided, and in the relatively little time that he will devote to the matter. This work is taken on as a none too-welcome side issue, which he performs in response and in proportion to his public spirit and for which he is to receive practically no commendation and often much censure. Rare is the school official who devotes any great amount of time to the understanding and appreciation of his office. The reasons for this are very obvious. He will not, and cannot, spend hours and hours upon the study of such a work as that of either Dr. Strayer or Dr. Updegraff. He hasn't the hours at his disposal for one thing, and these studies are not in terms to enforce their value upon his flitting attention. What he needs is something gotten up in more or less graphic shape, which will be as nearly as possible self-explanatory. He will not read any great amount of printed material, and pages of figures are worthless unless interpreted. He has not had the training to enable him to do this with any degree of profit for time spent. And last but not least, such studies as these two very rarely come to his notice. Not one time in a thousand does he even know that they have been made.

A third significant study is that made last year by Dr. W. S. Deffenbaugh, Chief of the Division of School Administration, of the United States Bureau of Education. Dr. Deffenbaugh's study is entitled "School Administration in the Smaller Cities,"³ and is based on data collected, by visit and questionnaire, from some 1,300 cities and towns of 2,500 to 30,000 population. It has the significance of being the first attempt to include towns as small as 2,500, and therefore has greater value in connection with this study than any of the other efforts to study financial practices. The Deffenbaugh study does not include any tables relative to finances for towns under 5,000, however, and therefore does not anticipate this study. The statistics given for cities below 5,000 deal with organization of boards of education. There are two tables dealing with budget distribution that are significant in connection with this study, and which will be mentioned later. These tables deal with budget distributions in cities of 5,000 to 10,000 and 10,000 to 25,000. Dr. Deffenbaugh has a discussion entitled "Consideration of the Budget," covering one page, and containing very valuable data. His study also contains

¹A Study of Expenses of City School Systems. Harlan Updegraff. Bulletin 5, 1912. U. S. Bureau of Education, Washington, D. C.

²School Administration in Smaller Cities. W. S. Deffenbaugh. Bulletin 44, 1915. U. S. Bureau of Education, Washington, D. C.

³City School Expenditures. No. 5, Contributions to Education. G. D. Strayer. Published by the Bureau of Publications, Teachers College, Columbia University. New York.

a section entitled "Finance," covering some ten pages, and treating of the following topics: Local Funds, School Bonds, Interest on Daily Balances in Banks, and Gifts. The second and third of these are of great interest, and should be read by every school administrator. Therefore, the Deffenbaugh study, valuable for the smaller school systems as it is, does not contain a great deal of data bearing on financial practices, and does not treat, under finances, the most significant group of this study, i. e., that between 500 and 5,000. His discussion of the "School Board" and the "Superintendent" are the most lengthy parts of the bulletin, and are very valuable.

To be sure, these three studies have a rich suggestive value for the small town schools, even for those in the group between 500 and 5,000, presupposing that the administrators in this type of school were to secure and diligently study the same. Here is the rub. These studies have been so technical as to be of relatively little value to men untrained in the technicalities of statistics. Studies of this kind are needed which do not involve mathematics. Another feature of these studies constituting a serious limitation to their value for the smaller school systems is that fact that they are in terms of such magnitude that they furnish no basis of comparison whatever. They are well-nigh inapplicable to the problems of the small school system. Underlying principles may be the same, but the men here want figures, not principles, for comparison—figures of like magnitude to their own in order to tell something about where they are.

We have up to this point established the truth of our statement that, so far as we are informed, no one has attempted to study the financial practices of the cities and towns below 25,000, and particularly of the towns between 500 and 5,000. The Updegraff study deals only with cities over 30,000; the Strayer study does not go below 10,000; the Deffenbaugh study has one table dealing with budget distributions for cities between 5,000 and 10,000, this being the extent of financial statistics reported for the smaller towns. Having thus established our priority in the field, let us ascertain what seems to be the consensus of educational opinion as to the need of such a study, and as to the general state of affairs in the business end of the school systems.

Eight or ten men of national reputation in school administration were asked as to their opinion of the value and feasibility of such a series of studies as we contemplate, and to suggest lines of pertinent investigation. The following are quotations from a few of the replies.

Dr. H. A. Hollister, High School Visitor, University of Illinois: "I have read with interest your letter of December 3rd, and note your proposition for a study of administration of finances in schools of a certain type. . . . If you can work out a study on some such lines, and put beside it an ideal program, derived perhaps from such data as you may collect, and based on what might be considered a possible general average for the schools of the state in given centers of population, it seems to me you have done a very great service, not only to your own state, but to the cause of education in the United States."

Dr. George D. Strayer, Teachers College, Columbia University: "I am persuaded that this type of investigation is very much needed. Growing out of such an inquiry there should come a very definite plan for the keeping of accounts and the reporting of fiscal statistics. If such a reform can be accomplished, many of the problems of administration can be much more adequately handled than under the present conditions."

Dr. W. S. Deffenbaugh, Chief of the Division of School Administration, United States Bureau of Education: "Since some standards could be established for the small towns and cities, the young city superintendent could then see how his school varies from the standard practice. As you say, little or no attention is given to the subject of finance in many of these towns and cities. The bookkeeping is usually poorly done. There is no attempt to classify accounts."

Professor Albert W. Rankin, College of Education, University of Minnesota: "Your letter concerning the proposed study of financial phases of school administration in villages and small cities indicates an interest in a phase of school work which has thus far been very much neglected. Young men graduate from colleges and go into the work of school supervision single-handed, and with almost no preparation. They lack experience in dealing with school boards, information in regard to school laws, and very often any valuable experience in classroom instruction. . . . The financial affairs of such districts are difficult to handle, and are all too often mismanaged."

Let us now ascertain what good authorities have to say as to the general state of affairs in the business end of school administration, and to attempt to point out the reasons therefor.

The SCHOOL BOARD JOURNAL stated editorially, in the February, 1916, issue: "The business administration of the schools is, without question, the weakest portion of the whole machinery of the schools. It has been the seat of trouble that has interfered with the progress of the educational operations. We need only to recall such facts as the unscientific method of making school budgets, the inadequate systems of school accounting, loose methods of supply purchasing, and unwise provisions for school accommodations, to verify the truth of our assertion."

Superintendent Ernest W. Robinson, Webster, Mass., in an able series of papers recently appearing in the SCHOOL BOARD JOURNAL, under the title of "Some Defects of Public School Administration,"⁴ makes the following trenchant statements relative to financial management: "The most serious criticism directed against school officials by the forceful part of the community is that which accuses them of the poorest business sense and management on the material side of education. The gravity of such criticism is evident when it is realized that the educative process is not merely a grouping of a few discrete elements, buildings, pupils, curricula, textbooks and instructors, impinging on each other mechanically. Its best realization is attained as a result of brainy and purposeful planning by administrative officials, who must combine these elements and motivate them into an active, efficient educational operation, a "going concern" as the business world would term the process. To do this well at the present day means a large expenditure of money. In the future it is going to mean much more.

"The public pays the bills and rightfully asks for a complete accounting. It is suspicious of a rapidly mounting annual cost of education, coupled with apparently the same material equipment each year, and a slower increase of school population. As one student of school finances and operation well says, 'Along with this great increase in expenditures, and with the demand for still greater sums of money for public education, there has arisen a necessity for greater ability in the handling of school moneys, a desire to know how the money is spent, and what results are obtained.'"

"The quick of public interest in education is touched instantly when inquiry penetrates to the

question of results and costs. Faults of mechanical organization, of the various elements of teachers, teaching, grading and curriculum have for the average citizen but passing interest. The amount of money expended, no matter in what department, what it buys, and who conducts the business—these are the sensitive areas in the mind and feeling of every typical American community."

Dr. G. D. Strayer states further,⁵ "By careful comparative study, railroad men know the average cost of hauling freight per ton per mile, and the cost per mile of transporting a passenger. Those administering schools should be as well informed upon the cost of education."

No thinking individual would deny the statement that the business end of educational administration, costing our cities and towns far more than any other single item of public expense, is managed as no other line of business enterprise would dare to be managed. No business, involving as large expenditures as the public school systems, could exist on any such hit-and-miss policy. This charge is an ever-recurring one, applying to the larger cities and towns as well as to the smaller, and with obvious worse results because of the magnitude of the problem. Mr. S. F. Conley of the Board of Education of Columbia, Missouri, makes the following very interesting statement:⁷ "During the first four years of my service on the school board of Columbia, we handled financial matters according to precedent, in a rather loose way, when we discovered one day in July that we had overdrawn on the sinking fund to the extent of \$10,000. You can readily understand that this was a very serious proposition for the board and one which threatened serious difficulties. Our trouble was brought about, to a large extent, thru the fact that our treasurer deposited all the school moneys in one account, and thru the further fact that, when we appropriated money for various purposes, we did not know just what we had in each fund. This difficulty began to make us think. The only thing we could do was to inaugurate a rigid system of economy until we had replaced the money in the sinking fund.

"We pursued this policy of economy in the same haphazard way as we had succeeded in getting into trouble. We considered nothing but saving money and curtailed our expenses in a number of ways, some wisely and some at the expense of the efficiency of our schools, until we learned that our high school had been dropped by the state school department into the second class of approved schools. As you can readily understand, it was very unsatisfactory to have a second class high school in the educational center of the state and the seat of Missouri's state university. Our pride was touched and we decided that it was time to have schools the equal of any in the state, and to manage so as to live within our income." This experience of the Columbia board is undoubtedly common. The only thing uncommon in connection with it is the fact that they are sufficiently altruistic to relate their experience for the benefit of other boards similarly situated. Countless examples of such financial stringencies, due to lack of systematic management, might be cited.

Now to the reasons for the chaotic conditions existing in the financial management of school systems: Undoubtedly the largest single reason lies in the lack of business ability characteristic of boards of education. This lack of business ability is the most persistent charge made against the average school man. Is this true, and if so, what is the explanation? That it is true can scarcely be denied by anyone familiar

⁴American School Board Journal, December, 1915, p. 16.

⁵G. D. Strayer: City School Expenditures, p. 5.

⁶Proceedings of the National Education Association, 1890, p. 345.

⁷American School Board Journal, August, 1916, p. 14.

MECHANICAL EQUIPMENT OF SCHOOLS

Harold L. Alt, M. E.

Part XVII—Electric Lighting.

The importance of providing for the proper lighting of classrooms is one which should not be underestimated. The need of illumination for day classes on dark days and the requirements of night schools both combine to render satisfactory lighting an essential of schoolhouse planning and equipment. It is not within the province of this discussion to argue the peculiarities of the eye, or the diseases resulting from a lack of proper or sufficient lighting. These topics are distinctly within the province of the school hygienist, the physician and the oculist. It may not be out of place, however, to note that the eyes of average pupils are subjected to their first concentrated use in the schoolroom and that the eyes of children of school age are only in the transitory period of growth succeeding babyhood and are far from possessing the visual strength which is acquired in later life. Eye troubles developed during this time are likely to become chronic weaknesses later and should be carefully guarded against.

There are in all some twenty-one million school children in the United States of whom not less than two million are troubled by defective vision. Of course, this is a dry and statistical statement. Yet the fact is conducive to thought, even tho it does not necessarily follow that these two million pupils are visually defective on account of poor light in the schools. Some children develop eye troubles before entering school and still others abuse their eyes by overstudy or by other means for which the schools could not possibly be held responsible. But admitting that the trouble is there, it certainly should not be aggravated in the classroom where the school boards are responsible.

Artificial illumination has always been designed with the idea of producing a condition approximating sunlight. How poorly such an approximation really is (when obtained from various sources of artificial light) the reader is fully aware of, yet the modern systems of lighting more nearly approach such an ideal condition than any methods previously developed.

The natural lighting of the modern classroom has worked down to a fairly consistent design in which the windows equal in area 14 to 25 per cent of the floor area and are arranged on the left-hand side. It has been recommended by experts on illumination that the depth of classrooms (perpendicular to the window wall) should not be greater than twice the height of the window above the top of the desks; also that the walls be light colored and the ceiling white. With such design the most satisfactory results will be obtained, and the light walls and white ceiling will also assist the artificial illumination.

Other items also enter into the matter of making artificial light satisfactory. Installations, perfectly correct so far as design may be concerned, will give considerable trouble and result in much unnecessary eye strain if other matters are not made to harmonize with the end in view. For instance, the use of highly glazed paper in the school books is bound to fatigue the eye in a very short time, regardless of the arrangement of the lighting. The size of type, the spacing of lines, the color of print and paper similarly affect the eye. Still worse, is the constant reflection from highly polished desks, glazed walls and glazed blackboards.

The development and perfecting of the tungsten filament for the incandescent electric light have revolutionized lighting in the last few years. The tungsten lamp has produced a whiter

light, far more nearly approximating sunlight than the old carbon filament. It does this at a cost of about 31 per cent of what the old carbon filament required, when compared candle power for candle power. It has made commercially practical the "indirect" method of illumination which, while vastly superior to the old direct style, is not as efficient a method of illumination. That is to say, it takes more current for indirect lighting but the rays are so diffused as to make such lighting very desirable.

There are three general methods of lighting consisting of:

(a) *Direct* illumination, in which the light shines directly on the surface illuminated.

(b) *Indirect* illumination, in which the source of light is entirely concealed by a shade and the illuminating effect is secured by reflection from some white diffusing surface which is usually the ceiling, and

(c) *Semi-direct* illumination, in which the majority of the light is indirect but a portion of the shade is made translucent so that the balance is "direct," but well diffused.

Diffusion of light is accomplished by breaking up the rays of light emitted from one or several sources so as to have a more even light of lesser brilliancy emitted from a larger area than the prime source. A clear glass globe gives practically no diffusion but the same globe in frosted glass diffuses to a very satisfactory extent.

In Fig. 149 is shown a standard type of direct lighting fixture which is inexpensive and of good design. In this case a glass, metal or porcelain reflector may be used and the rays of light from the lamp are thrown directly down onto the floor and furniture. The use of this fixture in long corridors, stairways, wardrobes and similar circulation passages, where the lights are almost always burning but where no one's eyes are exposed to the light for any long period of time, is recommended owing to the high efficiency of the direct light.

Fig. 141 is a similar fixture with a bowl of translucent glass which tends to diffuse the light to a great extent. This fixture is recommended for such rooms as the principal's main office, waiting room, medical examination room and similar locations where pupils or instructors may have their eyes subjected to the light for longer periods.

Fig. 142 is a frosted or semi-transparent shade covering lights where the headroom is low as under stairways, etc., and where longer fixtures would be in the way.

Fig. 143 indicates a fixture with an opaque metal reflector that throws all the light up to the ceiling from which it is reflected downward. This is the common type of indirect fixture and is recommended for classrooms, art rooms, dress-making, typewriting rooms, etc., including all places where pupils are likely to be subjected to

artificial light for long periods. Its chief disadvantage consists of the rather dark and gloomy appearance of the under part of the reflector.

Fig. 144 shows a type of semi-indirect fixture in which the illumination of the glass bowl results in some light passing directly downward while the balance is reflected onto the ceiling by the bowl the same as in the indirect fixture just discussed. This fixture is recommended where the cost of current is an important feature. With less current consumption, the lighting results of this fixture are almost as satisfactory as with the purely indirect fixtures.

Besides the ones illustrated, there are other derived variations and designs for fixtures *ad infinitum*. All are based on the types of fixtures shown and on combinations thereof. Many such fixtures possess real merit but it is impossible to discuss all here. Their characteristics are largely the same or similar to the typical fixtures already cited.

After the question of fixtures is decided the matter of their location becomes imperative. Usually school authorities do this backwards; that is, they locate the outlets long before they know what kind of fixtures will be purchased. Be this as it may, the outlets must be located when a building is built and—right or wrong—they are therefore located.

It has been proven by experience that for the standard sized classroom measuring up to 24 ft. by 32 ft., or thereabouts, four outlets will give fair, six good, and nine excellent results with direct illumination. With the four outlets, 150-watt lamps are generally used, giving 600 watts for the room. With six outlets, 100 watts are usually installed giving 600 watts for the room. With nine outlets, lamps of 60 watts each, or 540 watts, are sufficient. Philadelphia, New York and Boston use nine outlets, and twelve are unusual but not unknown. With direct lighting the effect of nine 60-watt lamps is much easier on the eyes than six 100- or four 150-watt lamps, as the nine outlets distribute the sources of light and render the illumination more even. With indirect fixtures four outlets should be enough, but the new gas filled lamps of 200-watt size should be used. As a general thing when outlets must be installed before the kind of lighting is decided upon six outlets are adopted, these being very satisfactory for direct fixtures and ideal for indirect or semi-indirect work.

It might be explained parenthetically here that common tungsten and carbon filament lamps raise their filament or incandescence in a vacuum of more or less perfect intensity. The lamps known as "gas filled" raise their filaments to incandescence with the aid of a gas, inside a gas-tight bulb; hence the term "gas filled." Gas filled lamps are entirely too bright for direct lighting, being used in the larger unit sizes, for indirect and semi-indirect fixtures.



Fig. 140

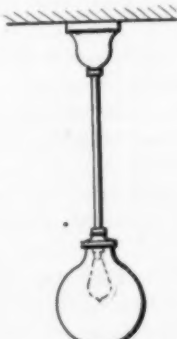


Fig. 141



Fig. 142

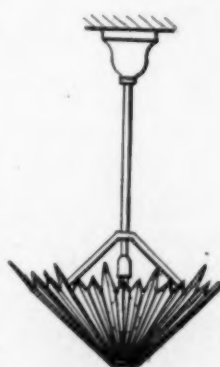


Fig. 143



Fig. 144

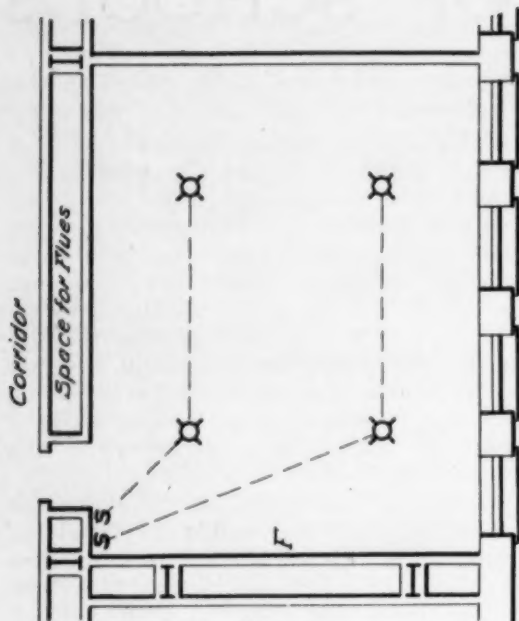


Fig. 145

One 150-watt vacuum bulb is generally considered as approximating one 100-watt gas filled lamp.

From this it can be deduced that the current per classroom for various combinations will run about as follows:

Method of Illumination	Type of Bulb	Approx. Watts Per Room
Direct Lights	Vacuum Tungsten	600
Indirect or Semi-indirect	Vacuum Tungsten	900
	Gas Filled Tungsten	800

This means that while indirect lighting adds over 50 per cent to the candle power, gas filled bulbs cut the current per candle power to about 50 per cent, thus making the actual increase in current consumption over direct lighting only about 30 per cent. With indirect and semi-indirect illumination it is necessary that the fixtures be installed so as to bring the top of the glass approximately three feet from the ceiling in rooms eleven to fourteen feet high.

It should be pointed out here that while indirect and semi-indirect fixtures approximate ideal lighting they have certain objections peculiar to school work. The objections have been regarded so seriously as to prohibit their adoption in at least one case, viz., New York City, and there are others who have had similar troubles.

These faults mainly lie in the fact that the pupils find the fixtures good receivers for paper wads, erasers, pencils, rubbers, waste paper, etc. Difficulty is also experienced in making the janitors keep the bowls clean, as these are concealed from view, and very rapidly collect dust.

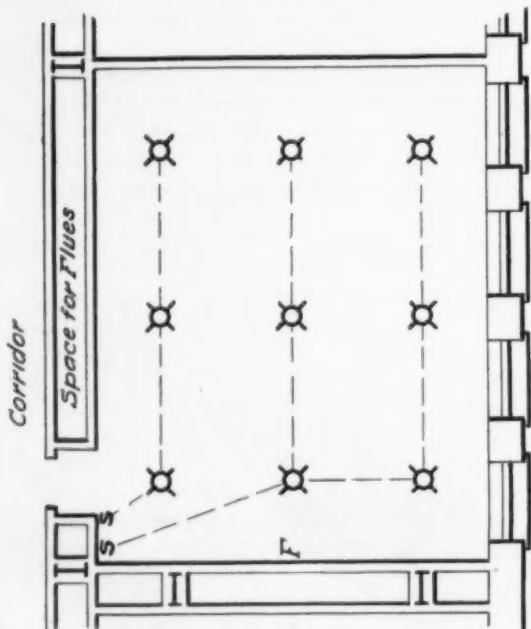


Fig. 146

This dust, if not removed obscures the light to such an extent as to reduce the efficiency 50 per cent.

For the proper location of outlets the room should be divided into as many rectangles as outlets, and an outlet should be placed in the center of each rectangle. Some school boards make it a practice to set the lights slightly off center—toward the windows—so as to have the artificial light rays fall on an angle somewhat in imitation of the natural rays of light from the windows. It is of course impossible to actually produce enough change of angle to be of any importance and the location of the outlets in such unbalanced positions makes a very bad appearance in the room. One economy which every board may practice is that of putting the

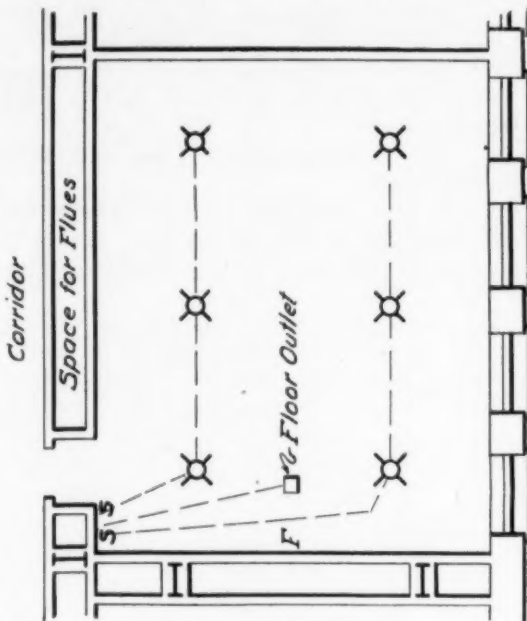


Fig. 147

row of lights along the windows on a separate switch. There are many dark days when there may be plenty of light adjacent to the windows but not farther away. In this case the farther outlets only are used. The lights along the windows are on a second switch and are used only at night and on very dark days.

The arrangement of outlets for a classroom having four lights, together with the wiring and switches for the same, is shown in Fig. 145. The more common six light classroom is shown in Fig. 146 which also indicates a floor outlet for the teacher's desk. The room with nine outlets is shown in Fig. 147, but this arrangement is seldom used. In all cases the lights in the coat rooms should be on a separate switch. Where two coat rooms are adjacent one light can be made to do for both by using a dwarf partition

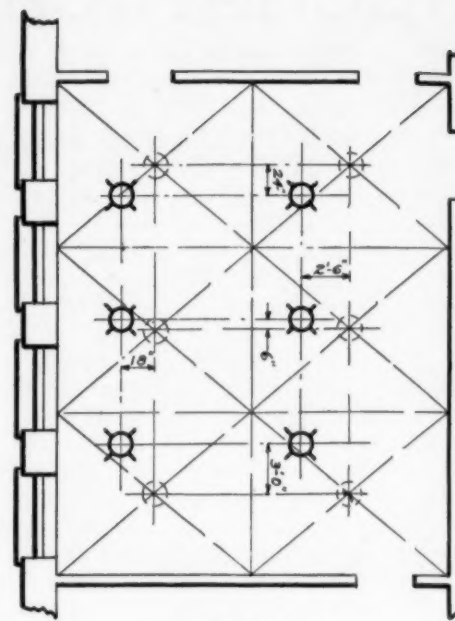


Fig. 148

and installing the light high and directly over the partition.

It has also become the practice in some cities to place a floor outlet under the teacher's desk to allow for the use of a desk lamp, if desired. In such cases the outlet is made in a box, flush with the floor, into which an extension cord for the desk lamp is plugged. Such outlets are installed only with direct lighting. In some schools in which visual instruction is emphasized a wall plug is provided in the rear of the room for a small stereopticon.

In corridors, of course, illuminating requirements are not so exacting, being only one-third to one-fourth the requirements of classrooms, and outlets are seldom spaced over 40 feet apart. Usually 100-watt lamps are employed spaced about 30 feet apart. Shorter spacing and smaller units (60 watts or less) will give more uniform light than longer spacing and higher powered lamps, but the first cost is greater.

In lecture rooms the light should be particularly good at the front of the room where experiments will be carried on and at the rear an outlet of 5,000 watts capacity is usually provided for stereopticon use.

It is also a good idea in locating wall switches to place them six feet from the floor to prevent their manipulation by the younger pupils.

For those interested in the eccentric location of outlets for classrooms the plan shown in Fig. 148 is given. Here the normal locations of a six light arrangement are shown in dotted lines and the eccentric locations are indicated in full lines, the distance between the normal centers and the modified centers being given in each direction.

A BIT OF FEMININE SUBJECTIVE

Irma L. Wallace

I like men.

I am neither a suffrage-feminist nor an iconoclast. I am merely a kind of woman—genus, pedagog.

Since this is an age of investigation into impure foods, Machiavellian beautifiers, and dollar-down book deals, I dare at least to wonder why men teachers should be paid higher salaries than women teachers.

Should school boards consider it their duty to pay for value received, or should they feel a masculine philanthropy which leads them to pension men teachers because of their sex?

Marriage or the possibility of marriage is not a comparative legitimate excuse; for nine-tenths of the women teachers are foregoing the Atlantic Monthly, Boston Symphony and old editions to help support families.

I would see all women teachers aspire to equality with men in the pedagogical, equal service, bank-book column. If this equality were established, perhaps the ranks would be cleaned of the "petted type" of men. Those who would still choose the path, could marry protectively.

All men should marry protectively. Doctors should marry nurses; sailors should marry fatalists or mermaids, and men teachers should relinquish the sex plum salary and marry land ladies.

I recently learned of a woman who retired from the teaching profession after 25 years of service. Her successor was a pedagogical fledgling, whose salary exceeded that of his predecessor by the sum of one hundred dollars. At the close of the school year, he resigned saying that he refused to be a high class nurse maid.

(Concluded on Page 74)

A High School Day of Six Hours and Directed Study

Superintendent A. S. Martin, Norristown, Pa.

Public high schools should be organized from the standpoint of the student and the problem of making him efficient. This organization cannot be wisely left to the high school teacher.

The teacher is prone to view any change from a narrow point of view because of his restricted experience of life and particularly is this true of his school life. Many teachers have taught ten, twenty, or thirty years and have never seen any other teacher teach. Such limited experience handicaps the teacher in his grasp of the values of his profession. He will even have difficulty to appreciate lectures and books on pedagogy because he has not had the mental experience required to interpret the thoughts of those who have observed more widely. Until teachers are permitted at least a day in twenty to observe the work of other teachers and the management of other systems of schools than those of which they are a part, we cannot hope to find them enthusiastically on the side of progress unless progress is defined as increased wages, fewer hours, and less work.

The long school day and directed study in Norristown is not an experiment. It has been in operation three years and has met reasonably all expectations. Three years ago, the high school had a five-hour school day and its sessions closed at 2:15; now it has a school day of six and one-quarter hours and its session closes at 3:30.

At a parent-teachers' meeting in the interest of the high school about three years ago, I said to a large body of parents and to the teachers that if the high school management were my sole affair, I would have in addition to a period for devotional exercises a school day of six one-hour periods in which the first half of each period would be devoted to study under the quiet direction of the teacher and the second half of the period to an intensive recitation. The reasons for such an arrangement I at that time summarized as follows:

1. It offers an opportunity to teach the students how to study.
2. It places the work of the school where it ought to be, under the direction of the person particularly fitted, the teacher, to direct it. The work will be done in the place particularly fitted for study, the school plant.
3. One-half hour of study followed by one-half hour of recitation avoids fatigue and at the same time places the student under the teacher's influence one hour instead of 45 minutes.
4. The work will be done in daytime and the fatigue and eyestrain due to night study will be eliminated.
5. The student will gain time. At present much time is wasted in study because the student frequently studies under conditions which are unfavorable. He frequently does not know how to approach his work and becomes discouraged and loses time.
6. It insures some preparation by every student. This will make the teaching more effective. When pupils are expected to prepare their lessons at home, many fail to do so.
7. The evening belongs to the home, not to the school. It is the time for the family hour, for social culture, and for legitimate entertainment. It is the time for relaxation and the time when the mind should be diverted from the business of the day. It will mean greater companionship of parents and children during the high school period.

8. This plan recognizes the value of a rhythmic life: a time for work; a time for relaxation; and a time for sleep.

The generous reception of my remarks and the numerous requests of interested parents to relieve the home stress by the longer school day and directed study led me to explain informally the plan at the next meeting of the committee of the board. This was done because only one of the seven members of the board had found it convenient to attend the parent-teachers' meeting. Every member of the board was strongly impressed with the plan and the committee voluntarily voted unanimously to extend the school day and to introduce the directed study plan. At the following regular meeting the school board ratified the action of the committee and directed that the change be made as soon as expedient.

The next day, Saturday, the newspapers announced the action of the board and also stated that the high school students would go on a strike. On the following Monday I explained the nature and reasons for the change to the high school students as they were an interested party. The student body received the explanation enthusiastically. Members of the senior class urged me to make the change at an early date so that they might have the benefit of the new plan of work. On March 20, 1913, the following announcement was read by the high school teachers to their students and announced to the public thru the newspapers: The extended session of the high school will begin on March 24th. The number of sessions will remain the same. The intermission at noon will remain the same. The session will begin at 8:45 and close at 3:30. The periods will be one hour in length.

The first half of each period will be devoted to study under the direction of the teacher. During this portion of the period the teacher will not use the time for marking papers or for study. The entire time will be devoted to the supervision of study. The last half-hour of each period will be devoted to the purpose of the recitation.

Students who carry the minimum requirements will have one full period for study each day in addition to the half-hour for preparation prior to each lesson. Twice a week they will have two hours in addition to the half-hour preparation prior to each lesson. Students who carry an additional subject will have a full hour for study twice a week only. Students who cannot gain a good standing in their lessons by using all the available time for study in school are urged to supplement the school work by study at home until a satisfactory standing is attained.

The real problem was to train the teachers how to teach the student to study. After observation and a frank discussion of the subject with the high school teachers, each teacher was furnished the following positive criticisms on directed study and the recitation.

Two things are essential in training a student in school. He must gain impressions and he must acquire the habit to express intelligently the impressions gained. During the study period the student learns how to gain impressions thru his own initiative and acquires the habit of self-help. The recitation offers an opportunity for self-expression and during it the student acquires the habit of clear and full self-expression.

Provision has been made in our schools for directed study so that the students may gain

with a minimum amount of time and effort habits of systematic industry and concentrated self-help. During this period the teacher will devote her entire time to the direction of the study of the student.

Several things are necessary for effective study. The physical conditions of the room must be conducive to good health; apparatus, books, and supplies should be convenient and in orderly arrangement; and there should be no time wasted in conversation or disorder of any kind. The teacher's motive ought to be to inspire the student with a desire for vigorous study; and work, after the class has changed, should begin at once. There should be no spasmodic or trivial announcements on the part of the teacher during the study period. Raising the hand and waiting for assistance, or raising the hand and waiting for permission to ask for supplies, are a waste of time. When a student needs supplies he ought to know where to get them and how to get them without disturbing the teacher or the school. The student's attitude should be active, not passive.

The student should always be supplied with pencil and paper for the purpose of making abstracts of importance to offer as a contribution in the recitation. This will train to differentiate essentials and non-essentials in lessons. It will also cultivate the power of organizing the essentials of a lesson into a brief form.

The study period is not intended to enable the teacher to study the lesson or to mark papers. Neither is it a good plan to permit pupils at the teacher's desk for the purpose of securing help while others sit and wait and watch for their turn, or possibly stand about the teacher's desk waiting.

Several things are essential in conducting a recitation. The teacher must be a master of the subject matter and must have clear and definite ideas as to the essential points of the lesson. He must have this mastery and clearness of vision not for the purpose of reciting the lesson but in order that he may direct intelligently and pass judgment correctly on the work of the students. Students ought to be encouraged to discuss adequately the assigned subjects. A single word is not a discussion. Sentences of definite content and paragraphs of related ideas should be required. After a student has made his contribution, the other students of the class ought to supplement or pass judgment on the matter presented. The raising of the hand, as a rule, ought not to determine the individual who answers a question or who supplements the discussion. Every individual should be held responsible for a contribution at any point in the recitation. Fear, humiliation, and ridicule are not good incentives to study and recitation. Talk on the part of the teacher which is vague and unrelated to the lesson should be eliminated. Time consumed by the teacher in such talk abridges the time which ought to be given to the students for the purpose of exercising them in expression.

A student marked B, C, or D in his lessons ought to be informed why he did not receive an A. His deficiency should be pointed out to him and he should be told how this deficiency may be removed. How can a student improve his work if he does not know in what particular his work is considered unsatisfactory?

Assignments should be clear and definite because they have a direct bearing on economy in study. The attitude of the student will indicate whether the assignment is well made. The assignment becomes the aim of the next lesson

(Continued on Page 71)

Hiram C. Case, Chief of Statistics Division, University of New York, Albany, N. Y.

In order to put such a system into successful and practical operation, it is necessary not only to agree upon what its schedules shall be but to have them universally adopted. It remained, therefore, for the University of the State of New York (The New York State Department of Education) to be the first to prescribe a uniform schedule of recording and reporting school expenditures and to require all school authorities in that state absolutely to adopt this system under the close supervision of the central authority. The New York State Department has always required accurate reports from each city and school district under its jurisdiction. For several years past they have been giving the matter of financial reports special consideration. Last year the Department asked the New York State Association of City and Village Superintendents to appoint a committee to take the matter up with them. This committee met at the Department in January, 1916, and, in the main, endorsed the schedules heretofore worked out and referred to above. The committee insisted that the Department should work out a system of keeping the books which should be uniform thruout the state. The matter was then taken up with the United States Bureau of Education at Washington and the schedules as worked out for New York State were adopted by the United States Commissioner of Education. They were also approved by a committee of the National Association of School Accounting Officers. It now remains for the several state departments thruout the United States to take similar action and the system of reporting will be uniform in fact.

to character. In the system of bookkeeping that has been worked out each of these schedules is referred to as a form and numbered from 2 to 9 inclusive. Form 1 is the controlling account and is called the voucher register. Hereafter, we shall refer to the schedules by their form numbers. The schedules are shown on pages 24 and 25.

It will be noted that on the ledger form under the headings of each column, in the first horizontal line, there is given the number of the question on the report form that the total of that column will answer, and on the report blank in the column headed "Ledger Column" there is given the form number and column, the total of which will answer the inquiry on the report blank. Expenditures are to be reported separately for "Salaries" and for "Other expenses" under each subdivision.

Form 2 is intended to provide for recording what a manufacturer would term the overhead charges. On this form all expenses of the legislative body (board of education) and the superintendent of the plant (superintendent of schools) are provided for. Here also are to be recorded the expenses of school elections, taking the school census, enforcement of the compulsory education laws and all other expenses that have to do with the general control or general management of the schools.

On form 3 all expenses of instructional service are to be recorded. These expenses are divided so as to show the expense of supervisors of grades and subjects, the expense of the principal's office and the expense of actual teaching. Everything that goes toward paying for actual instruction of the children either in the line of personal services, textbooks or supplies used for that purpose is recorded on this form. Separate ledger accounts may be kept of elementary instruction, secondary instruction, vocational instruction, training or normal school instruction, night schools, manual training, domestic science or even of each grade if the accountant chooses to go so far.

On form 5 is to be recorded all expenses for maintenance of the plant; that is, of keeping the plant up to its original condition or newness. All expenses for repairs, redecorating, repainting, replacement of wornout furniture or equipment should be recorded on this form.

On form 6 should be recorded all payments for pensions, rents, insurance, taxes, etc., which are termed fixed charges.

On form 7 should be recorded all expenses of debt service; that is, the payment of interest on loans, the repayment of the principal and refunds of taxes and tuition erroneously paid.

On form 8 is to be recorded all expense of capital outlay. This includes new land, new buildings, new furniture and new equipment when originally acquired. Extreme care should be used to distinguish between original acquisition and construction, and the replacement of old. The former is capital outlay and the latter is maintenance or upkeep.

On form 9 is to be recorded all expenses for auxiliary agencies and other sundry activities. But very few, if any, of the expenditures called for on form 9 are necessary in maintaining a legal school. These expenditures are of a voluntary nature. They are activities undertaken by the board of education for the benefit of the community or of the children in the school, and the amount recorded on this form shows the

FORM 1 OF SCHEDULES DEVISED BY MR. CASE FOR UNIFORM ACCOUNTS TO BE USED IN NEW YORK STATE.

School Board Journal

GENERAL CONTROL (REGULATIVE AND EXECUTIVE SERVICE)

FORM 2

DATE	VOUCHER NUMBER	CODE	BOARD OF EDUCATION (SERVICES OF REGULATION AND CONTROL)							SUPERINTENDENT OF SCHOOLS (SERVICES OF DIRECTION AND CONTROL)							TOTAL EXPENSE															
			BUSINESS ADMINISTRATION			EDUCATIONAL ADMINISTRATION				SUPERINTENDENT'S OFFICE			ENFORCEMENT OF COMPULSORY EDUCATION LAWS AND CENSUS ENUMERATION																			
			SCHOOL ELECTIONS	BOARD OF EDUCATION AND SECRETARY'S OFFICE		OTHER EXPENSES OF BUSINESS CONTROL	SALARIES	SUPPLIES	OTHER EXPENSES	SALARIES	SUPPLIES	OTHER EXPENSES	SALARIES	SUPPLIES	OTHER EXPENSES																	
				1	2											3		4	5	6	7	8	9	10	11	12	13	14				
NO. OF ITEM AS IN THE REPORT OF THE U. S. COMMISSIONER OF EDUCATION			1	2, 3, 4, 5	6, 7, 8, 9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30						
APPROPRIATION																																

INSTRUCTIONAL SERVICE (SUPERVISION AND TEACHING)

FORM 3

DATE	VOUCHER NUMBER	CODE	SUPERVISION							TEACHING							TOTAL EXPENSE OF INSTRUCTIONAL SERVICE										
			SUPERVISORS OF GRADES AND SUBJECTS			PRINCIPAL'S OFFICE				OTHER EXPENSES OF SUPERVISION	SALARY OF TEACHERS	TEXT BOOKS	OTHER SUPPLIES USED IN INSTRUCTION	CONVINCEMENT LECTURES AND EXHIBITS	OTHER EXPENSES OF INSTRUCTION												
			SALARIES	OTHER EXPENSES	SALARY OF PRINCIPALS	SALARY OF CLERKS	SUPPLIES	OTHER EXPENSES																			
									1							2		3	4	5	6						
NO. OF ITEM AS IN THE REPORT OF THE U. S. COMMISSIONER OF EDUCATION			1-20	21-30	31-40	41-50	51-60	61-70	71-80	81-90	91-100	101-110	111-120	121-130	131-140	141-150	151-160	161-170	171-180	181-190	191-200	201-210	211-220	221-230	231-240	241-250	
APPROPRIATION																											

OPERATION OF SCHOOL PLANT

FORM 4

DATE	VOUCHER NUMBER	CODE	BUILDINGS, OFFICES AND GROUNDS										TOTAL EXPENSE OF OPERATION OF PLANT														
			REPAIRS OF BUILDINGS AND GROUNDS	REPAIRS OF FURNITURE AND EQUIPMENT	REPAIRS OF ELECTRICAL AND PLUMBING EQUIPMENT	REPAIRS OF HEATING AND COOLING EQUIPMENT	REPAIRS OF TRANSPORTATION EQUIPMENT	REPAIRS OF OTHER EQUIPMENT	REPAIRS OF OTHER EQUIPMENT	REPAIRS OF OTHER EQUIPMENT	REPAIRS OF OTHER EQUIPMENT	REPAIRS OF OTHER EQUIPMENT															
														SALARIES	OTHER EXPENSES	SALARIES	OTHER EXPENSES	SALARIES	OTHER EXPENSES	SALARIES	OTHER EXPENSES	SALARIES	OTHER EXPENSES				
																								1	2	3	4
NO. OF ITEM AS IN THE REPORT OF THE U. S. COMMISSIONER OF EDUCATION			1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25
APPROPRIATION																											

MAINTENANCE OF PLANT (UPKEEP)

FORM 5

DATE	VOUCHER NUMBER	CODE	BUILDINGS, OFFICES AND GROUNDS										TOTAL EXPENSE OF MAINTENANCE OF PLANT														
			REPAIRS OF BUILDINGS AND GROUNDS	REPAIRS OF FURNITURE AND EQUIPMENT	REPAIRS OF ELECTRICAL AND PLUMBING EQUIPMENT	REPAIRS OF HEATING AND COOLING EQUIPMENT	REPAIRS OF TRANSPORTATION EQUIPMENT	REPAIRS OF OTHER EQUIPMENT	REPAIRS OF OTHER EQUIPMENT	REPAIRS OF OTHER EQUIPMENT	REPAIRS OF OTHER EQUIPMENT	REPAIRS OF OTHER EQUIPMENT															
														SALARIES	OTHER EXPENSES	SALARIES	OTHER EXPENSES	SALARIES	OTHER EXPENSES	SALARIES	OTHER EXPENSES	SALARIES	OTHER EXPENSES				
																								1	2	3	4
NO. OF ITEM AS IN THE REPORT OF THE U. S. COMMISSIONER OF EDUCATION			1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25
APPROPRIATION																											

FIXED CHARGES

FORM 6

DATE	VOUCHER NUMBER	CODE	FIXED CHARGES							DEBT SERVICE							TOTAL EXPENSE OF DEBT SERVICE										
			REPAIRS OF BUILDINGS AND GROUNDS	REPAIRS OF FURNITURE AND EQUIPMENT	REPAIRS OF ELECTRICAL AND PLUMBING EQUIPMENT	REPAIRS OF HEATING AND COOLING EQUIPMENT	REPAIRS OF TRANSPORTATION EQUIPMENT	REPAIRS OF OTHER EQUIPMENT	REPAIRS OF OTHER EQUIPMENT	REPAIRS OF OTHER EQUIPMENT	REPAIRS OF OTHER EQUIPMENT	REPAIRS OF OTHER EQUIPMENT	REPAIRS OF OTHER EQUIPMENT	REPAIRS OF OTHER EQUIPMENT	REPAIRS OF OTHER EQUIPMENT												
																SALARIES		OTHER EXPENSES	SALARIES	OTHER EXPENSES	SALARIES	OTHER EXPENSES	SALARIES	OTHER EXPENSES	SALARIES	OTHER EXPENSES	
																											1
NO. OF ITEM AS IN THE REPORT OF THE U. S. COMMISSIONER OF EDUCATION			1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25
APPROPRIATION																											

CAPITAL OUTLAY (ACQUISITION AND CONSTRUCTION)

FORM 7

DATE	VOUCHER NUMBER	CODE	CAPITAL OUTLAY										TOTAL EXPENSE OF CAPITAL OUTLAY														
			REPAIRS OF BUILDINGS AND GROUNDS	REPAIRS OF FURNITURE AND EQUIPMENT	REPAIRS OF ELECTRICAL AND PLUMBING EQUIPMENT	REPAIRS OF HEATING AND COOLING EQUIPMENT	REPAIRS OF TRANSPORTATION EQUIPMENT	REPAIRS OF OTHER EQUIPMENT	REPAIRS OF OTHER EQUIPMENT	REPAIRS OF OTHER EQUIPMENT	REPAIRS OF OTHER EQUIPMENT	REPAIRS OF OTHER EQUIPMENT															
														SALARIES	OTHER EXPENSES	SALARIES	OTHER EXPENSES	SALARIES	OTHER EXPENSES	SALARIES	OTHER EXPENSES	SALARIES	OTHER EXPENSES				
																								1	2	3	4
NO. OF ITEM AS IN THE REPORT OF THE U. S. COMMISSIONER OF EDUCATION			1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25
APPROPRIATION																											

AUXILIARY AGENCIES AND OTHER SUNDRY ACTIVITIES

FORM 8

DATE	VOUCHER NUMBER	CODE	LIBRARIES							HEALTH SERVICE							OTHER ACTIVITIES							TOTAL EXPENSE OF AUXILIARY AGENCIES AND OTHER SUNDRY ACTIVITIES							
			REPAIRS OF BUILDINGS AND GROUNDS	REPAIRS OF FURNITURE AND EQUIPMENT	REPAIRS OF ELECTRICAL AND PLUMBING EQUIPMENT	REPAIRS OF HEATING AND COOLING EQUIPMENT	REPAIRS OF TRANSPORTATION EQUIPMENT	REPAIRS OF OTHER EQUIPMENT	REPAIRS OF OTHER EQUIPMENT	REPAIRS OF OTHER EQUIPMENT	REPAIRS OF OTHER EQUIPMENT	REPAIRS OF OTHER EQUIPMENT	REPAIRS OF OTHER EQUIPMENT	REPAIRS OF OTHER EQUIPMENT	REPAIRS OF OTHER EQUIPMENT	REPAIRS OF OTHER EQUIPMENT	REPAIRS OF OTHER EQUIPMENT	REPAIRS OF OTHER EQUIPMENT													
																			SALARIES	OTHER EXPENSES	SALARIES	OTHER EXPENSES	SALARIES		OTHER EXPENSES	SALARIES	OTHER EXPENSES	SALARIES	OTHER EXPENSES	SALARIES	OTHER EXPENSES
NO. OF ITEM AS IN THE REPORT OF THE U. S. COMMISSIONER OF EDUCATION			1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25				
APPROPRIATION																															

PAYMENTS

EXPENSES (Cost of Conducting School System)

EXPENSES OF GENERAL CONTROL (Overhead Charges)	LEDGER COLUMN	TOTAL	SALARIES	OTHER OBJECTS
Business Administration				
1 School elections.....	2-1			
2 Board of Education and Secretary's office (Code).....	2-2 2-3			
3 Finance office and accounts (Code).....	2-3 2-3			
4 Offices in charge of buildings and supplies (Code).....	2-3 2-3			
5 Legal services (Code).....	2-3 2-3			
6 Operation and maintenance of office buildings.....	Forms 3 & 4			
7 Other expenses of business control.....	2-6			
Educational Administration				
8 Office of Superintendent of Schools (Code).....	2-7 2-8			
9 Enforcement of compulsory education, truancy laws and census enumeration.....	2-9 2-11			
10 Other expenses of educational control.....	2-14			
TOTAL EXPENSES OF GENERAL CONTROL.....				

EXPENSES OF INSTRUCTION DAY SCHOOLS	LEDGER COLUMN	TOTAL	ELEMENTARY	SECONDARY	NORMAL	VOCATIONAL	SPECIAL
Supervision							
11 Salaries of supervisors of grades and subjects.....	3-7						
12 Other expenses of supervisors.....	3-2						
13 Salaries of principals.....	3-3						
14 Salaries of principals' clerks and office assistants.....	3-4						
15 Other expenses of principals' office.....	3-5 3-6						
16 Other expenses of supervision.....	3-8						
Teaching							
17 Salaries of teachers.....	3-9						
18 Textbooks.....	3-10						
19 Other supplies used in instruction.....	3-11						
20 Other expenses of instruction.....	3-14						
Total Expense of Instruction for Day Schools.....							

EXPENSES OF INSTRUCTION NIGHT SCHOOLS	LEDGER COLUMN	TOTAL	ELEMENTARY	SECONDARY	NORMAL	VOCATIONAL	SPECIAL
Supervision							
21 Salaries of supervisors of grades and subjects.....	3-1						
22 Other expenses of supervisors.....	3-2						
23 Salaries of principals.....	3-3						
24 Salaries of principals' clerks and office assistants.....	3-4						
25 Other expenses of principals' office.....	3-5 3-6						
26 Other expenses of supervision.....	3-8						
Teaching							
27 Salaries of teachers.....	3-9						
28 Textbooks.....	3-10						
29 Other supplies used in instruction.....	3-11						
30 Other expenses of instruction.....	3-14						
Total Expense of Instruction for Night Schools.....							
TOTAL EXPENSES OF INSTRUCTION.....							

EXPENSES OF OPERATION OF SCHOOL PLANT	LEDGER COLUMN	TOTAL	SALARIES	OTHER OBJECTS
31 Wages of janitor and other employees.....	4-1			
32 Fuel.....	4-2			
33 Water.....	4-3			
34 Light and power.....	4-4			
35 Janitor's supplies.....	4-5			
36 Other expenses of operation of plant (Code).....	4-6 4-7			
TOTAL EXPENSES OF OPERATION OF PLANT.....				

EXPENSES OF MAINTENANCE OF SCHOOL PLANT	LEDGER COLUMN	TOTAL	SALARIES	OTHER OBJECTS
37 Repair of buildings and upkeep of grounds (Code).....	5-1 5-2			
38 Repair and replacement of equipment (Code).....	5-3 5-4			
39 Other expenses of maintenance of school plant.....	5-11			
TOTAL EXPENSE OF MAINTENANCE OF PLANT.....				

EXPENSES OF AUXILIARY AGENCIES AND SUNDRY ACTIVITIES	LEDGER COLUMN	TOTAL	SALARIES	OTHER OBJECTS
40 Libraries (exclude books) (Code).....	6-1 6-3			
41 Books (Code).....	7-8 7-12			
42 Promotion of health (Code).....	8-2			
43 Transportation of pupils (Code).....	8-4 8-5			
44 Care of children in institutions.....	8-6 8-7			
45 Provision of lunches (Code).....	8-8			
46 Community lectures (Code).....	8-9			
47 Social centers (Code).....	8-10			
48 Recreation (Code).....	8-11			
49 Other auxiliary agencies and sundry activities.....	8-12			
50 Payments to private schools (Code).....	8-13			
51 Payments to schools of other civil institutions (tuition).....	7-12 8-14			
TOTAL EXPENDITURES FOR AUXILIARY AGENCIES.....				

EXPENSES OF FIXED CHARGES	LEDGER COLUMN	TOTAL	SALARIES	OTHER OBJECTS
52 Pensions.....	6-1			
53 Rent.....	6-2			
54 Insurance.....	6-3			
55 Taxes.....	6-4			
56 Contributions and contingencies.....	6-5			
TOTAL EXPENSE OF FIXED CHARGES.....				
TOTAL CURRENT EXPENSES.....				

EXPENSES OF DEBT SERVICE	LEDGER COLUMN	TOTAL	SALARIES	OTHER OBJECTS
57 Redemption of bonds.....	6-7			
58 Payments to sinking funds.....	6-8			
59 Redemption of short term loans.....	6-9			
60 Payments of interest on bonds.....	6-10			
61 Payment of interest on short term loans.....	6-11			
62 Refunds (tax and tuition) (Code).....	6-12			
TOTAL EXPENSE OF DEBT SERVICE.....				

EXPENDITURES IN CAPITAL OUTLAY (Acquisition and Construction)	LEDGER COLUMN	TOTAL	SALARIES	OTHER OBJECTS
63 Land (Code).....	7-1 7-3			
64 New buildings.....	7-2			
65 Alteration of old buildings.....	7-4			
66 Equipment of new buildings and grounds (Code).....	7-5 7-6			
67 Equipment of old buildings and grounds exclusive of replacements (Code).....	7-7 7-8			
TOTAL EXPENDITURES IN CAPITAL OUTLAY.....				
TOTAL PAYMENTS FOR THE YEAR.....				
BALANCES AT CLOSE OF THE YEAR.....				
TOTAL PAYMENTS AND BALANCES.....				

FORM OF REPORT TO BE USED BY ALL SCHOOL BOARDS IN NEW YORK STATE.

generosity and progressiveness of the community.

From the above general statement it will be seen that on each form are recorded expenditures that are made for a definite activity of the board; or in other words, each form represents a separate function.

A comparison of expenditures between different school systems of practically the same size will be of value if it is positively known that the items that are being compared are made up in exactly the same way. The necessity, therefore, of making definite rules as to just what items shall be included on each schedule is obvious. In making these schedules it has been the purpose to classify the expenditures so that those which are capable of just comparison shall be included in a separate schedule and those which will not admit of comparison shall be entirely segregated. There has been much discussion as to where certain expenditures should be classified. Some claim that rent is a part of the cost of operation instead of a fixed charge and that insurance is a part of the cost of maintenance rather than a fixed charge. Perhaps they are right, but the value of financial reports

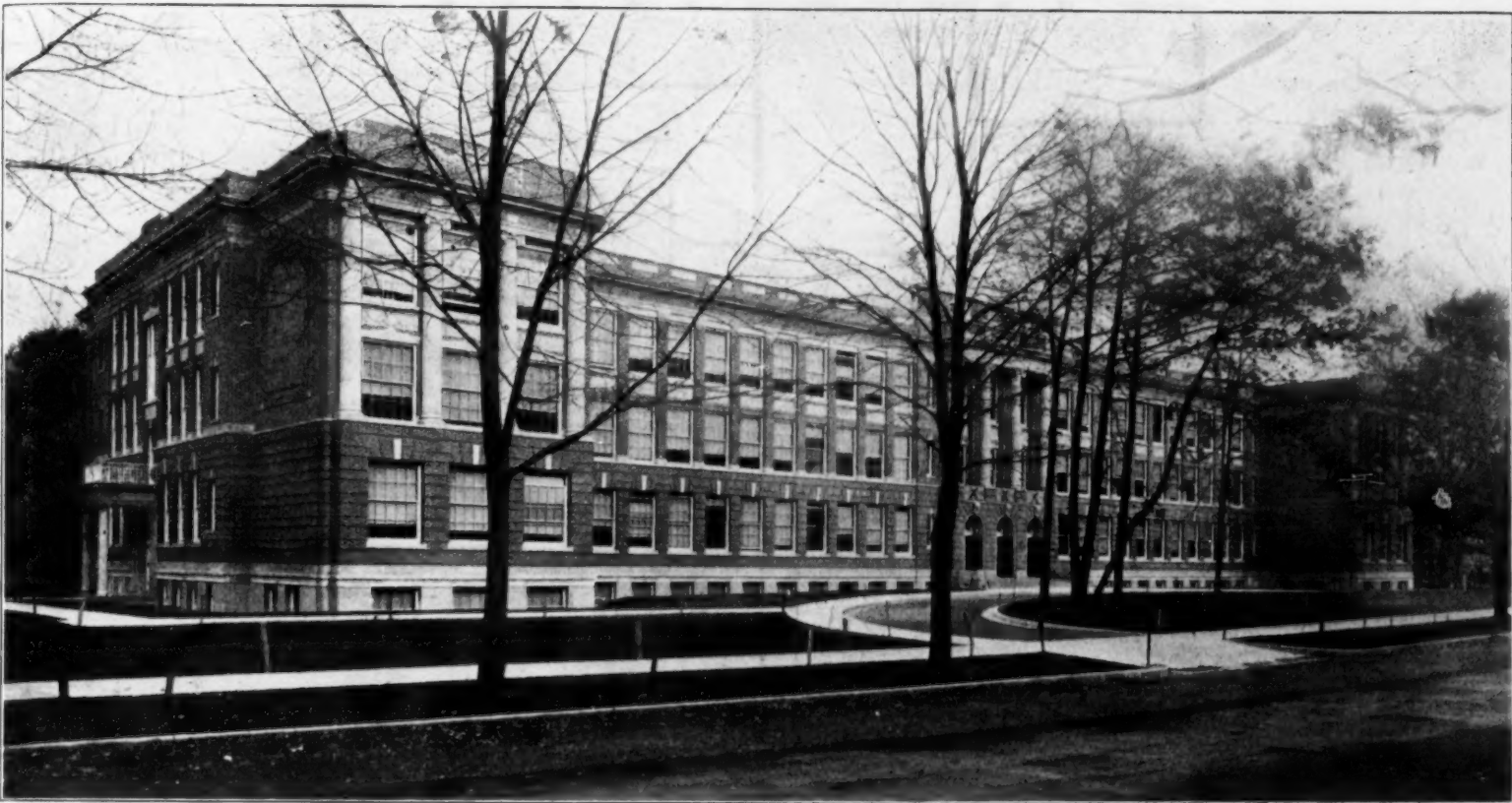
for the purpose of comparison is immediately impaired if it is found that in one instance the bookkeeper is including rent as a fixed charge and in another instance it is being included as a part of the operating expenses—so it is far better to forego the theory as to whether the classifications that have been made in this system are strictly scientific or not, for the benefit that will be derived from knowing just where each item is included and knowing that in making comparisons one is comparing like expenditures.

A considerable discussion was had as to what constitutes equipment and what supplies. In order that there might be no misunderstanding in these classifications, a definite list of articles to be classified as supplies and another list to be classified as equipment are given in the handbook of instructions.

Some expenditures are comparable in one way and some in another. For instance, in order to compare the cost of new buildings it is necessary to compare them on a unit basis. It is generally agreed that this unit basis should be the number of cubic feet contained in the building. Having determined the total cost of a school

building in one community and the total cost of a somewhat similar building in another community, the unit cost of the building will be determined by dividing the total cost by the number of cubic feet. The relative cost of the two buildings may thus be accurately determined. The cost for instruction and supervision will admit of comparison between any two systems. The unit for these comparisons may be either the average cost per pupil based on registration, or the average cost per pupil based on average daily attendance. Unless, however, it is positively known that exactly the same items are included in the cost of instruction in the one system as in the other the comparison is worthless. The cost of operating the plant, that is, the daily running expenses for heating, cleaning, lighting and making the building comfortable for the use of teachers and pupils are comparable items. Here again we must look for a unit basis. Whether the number of square yards of floor space or the cubic contents of the building is the fair unit of comparison is a debatable question. In any event the comparison would be absolutely valueless unless the methods

(Concluded on Page 68)



NEW HIGH SCHOOL, MONTCLAIR, N. J.
Starrett & Van Vleck, Architects, New York City.

MONTCLAIR HIGH SCHOOL

Occupied in September, 1915, for the first time and costing over half a million dollars to erect, the Montclair (N. J.) High School stands a lasting monument to the progressiveness of the local school board. The building, which is of imposing and impressive character as shown in the photo of the exterior, was designed by Starrett & Van Vleck, Architects, of New York City and stands on Chestnut Street, occupying the entire block between Midland Ave. and Park St.

The structure is practically fireproof thruout and is of fire resisting construction. The outside walls are of hard burned brick faced with Harvard brick and relieved with light colored limestone trimmings. The floors are floristyle concrete, poured on corrugated sheet metal centerings and reinforced with steel. In the corridors a terrazzo finish is applied, while the classrooms have maple flooring laid on sleepers embedded in the concrete; the shops have red cement floors.

The interior bearing walls are of brick, and light partitions are of terra cotta blocks. All the walls are plastered with a fine white finish below the stool and sand finish above. To retard fire transmission as much as possible kalamein doors and trim are used for all openings into domestic science rooms, shops, boiler room, and stair screens. In other portions of the building brown ash is used, except in the auditorium which is treated in white enamel and birch stained mahogany trim.

The building is built in the shape of an elongated letter H with a T shaped rear extension

connected thru the leg of the T to the cross bar of the H; this is shown in the general outline of the basement plan shown herewith. The school proper occupies the H section and the boys' and girls' gymnasiums the two wings of the rear T. The leg of the T furnishes an opportunity for a fine auditorium with natural light on each side and top. The H section of the building is approximately 300 feet long and averages about 120 feet wide, while the rear T section is some 175 feet long and about 60 feet wide; the leg connecting the two and forming the auditorium is roughly 75 feet long and 65 feet wide.

On the third floor are located rooms for chemistry, biology, drawing classes and various class and scientific lecture rooms. The second floor is utilized for principal's, clerks' and administration offices, study rooms, library and classrooms. On this level are also the auditorium gallery and gymnasium running tracks.

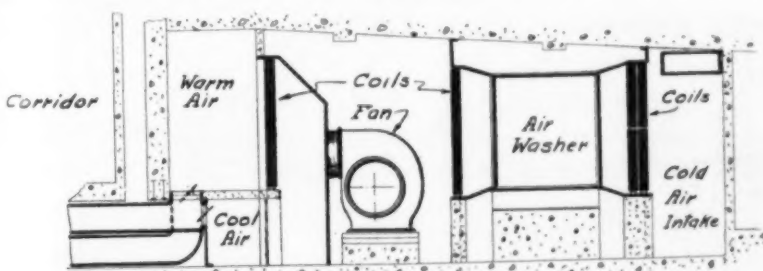
On the first floor are placed the men and women teachers' rooms, study room, general classrooms, and the main auditorium and gymnasium floors. The basement is occupied by

domestic science, sewing, boys' and girls' lunch-rooms, kitchen, shops, manual training and doctor's office. Under the auditorium are placed the two main fan rooms together with boys' and girls' shower and locker rooms, and under the boys' and girls' gymnasiums are located the auditorium fan rooms, boiler room and coal storage.

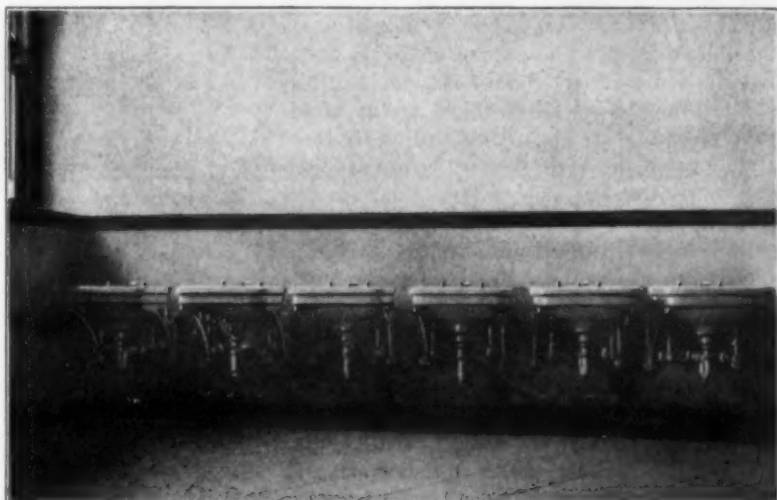
One of the many unusual features in this school is its erection on the site thru which a brook flows. It was necessary to take care of this brook by carrying it directly under two separate portions of the building in massive reinforced concrete conduits some six feet in diameter. The mechanical equipment of this modern edifice is also noteworthy, being designed by the R. D. Kimball Co., engineers, of New York City and up-to-date in every particular.

The system of heating and ventilation includes a boiler plant consisting of three 173 horsepower, 72 in. by 18 ft. 6 in. horizontal return tubular boilers which supply steam to the direct radiators and to the coils for tempering the fresh air. The steam piping is arranged so as to allow closing off the indirect heaters separately from the direct radiation.

The steam boilers altho used for low pressure are built for a working pressure of 125 lbs., so that in the future an isolated plant for the gen-



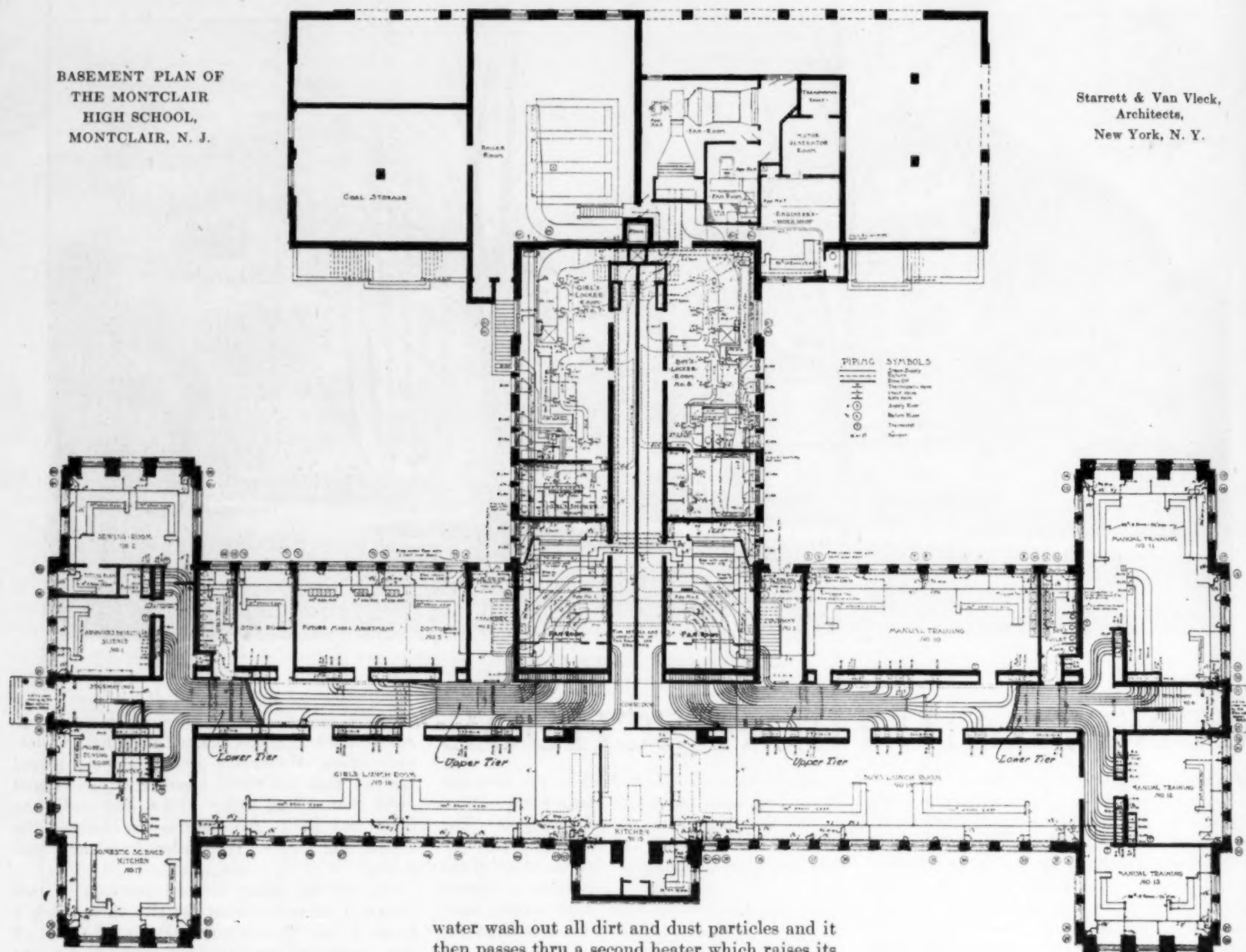
Cross Section of the Ventilating Apparatus in the Montclair High School.



Typical Battery of Wash Bowls in the Montclair High School.

BASEMENT PLAN OF
THE MONTCLAIR
HIGH SCHOOL,
MONTCLAIR, N. J.

Starrett & Van Vleck,
Architects,
New York, N. Y.



eration of electric current can be installed if desired.

The radiators are on what is known as a "two-pipe up-feed vacuum return line system" in which the condensation and air are carried back to a receiving tank in the boiler room from which the water is automatically returned to the boiler by an electrically driven return line pump. At night and during periods when school is not in session the piping is arranged to vent to the atmosphere in such a way as to form a vapor system having the steam on the direct radiators at 1 lb. pressure; the returns while operating as a vapor system go back to the boilers by gravity. The vento-heaters which temper the ventilation air are entirely on a gravity system and have air valves as is customary.

The radiators thruout, where not automatically controlled, have a graduated control valve which allows them to be turned on to whatever extent desired. In all classrooms, the auditorium, and other important portions of the building the radiators are turned on and off by thermostats located in the respective rooms.

The ventilation consists of three separate and distinct systems each having its air supply and air exhaust, with air washers, heaters, fans and motors. Two of these systems are for the classrooms, one being located on the east side of the building and one on the west side. The third system is for the auditorium, and is separate so as to allow the use of the auditorium when the classrooms are not in service.

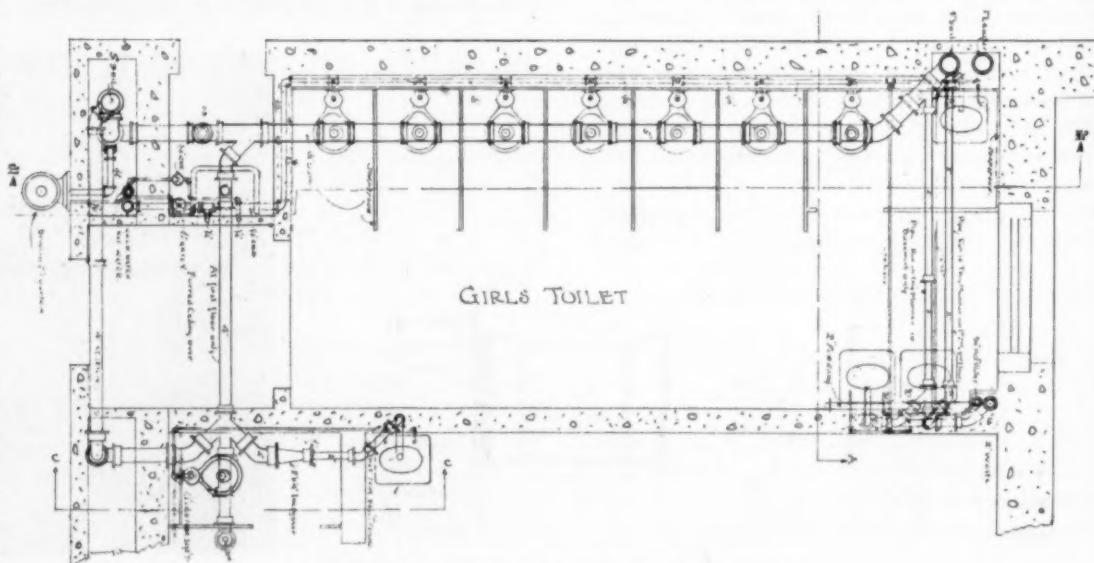
Fresh air for each of the three systems is carried thru a tempering heater which warms it above the freezing point. It is then drawn thru an air washer where finely atomized sprays of

water wash out all dirt and dust particles and it then passes thru a second heater which raises its temperature above the saturation point. The air is then picked up by the fan and discharged either thru or under a third heater into a chamber with a horizontal partition in the middle. This partition is arranged so that all the cooler air is confined below the partition while the warmer air which passes thru, instead of under, the third heater is confined in the space above the partition.

From these chambers separate ducts are run to each and every classroom so as to supply 30 cu. ft. per minute per pupil. These ducts have two connections at the fan room, one connection entering the upper hot-air chamber and the other connection entering the lower cold air chamber. Where these two connections join a

damper is placed in each. These dampers are so connected together that when the damper in the hot air connection is fully opened, the one in the cold air connection is tightly closed, and vice versa. These dampers are operated by small air motors which are controlled from thermostats located in the room. These thermostats are what is known as "intermediate" action type which means that they will hold the dampers either open on the hot air side or open on the cold air side or at any intermediate position required to maintain the classrooms at 70 degrees Fahrenheit.

Thus in the morning when the fans are not in service the steam radiators are held open by

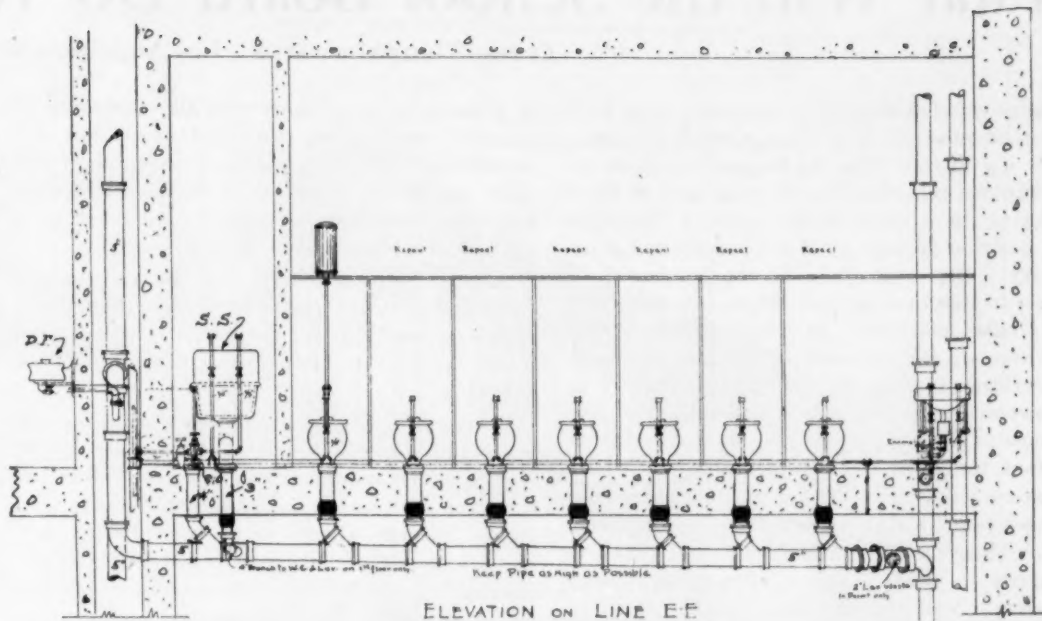


ENLARGED PLAN OF TYPICAL GIRLS' TOILET.

the classroom thermostats until the rooms get up to 70 degrees at which time they shut off the radiators. When the fan is started the thermostat controlling the duct dampers will throw on either hot or cold air or a tempered mixture of each as required to hold the desired temperature. If, a little later in the day, the arrival of the pupils and the warmth of the sun raises the temperature above 70 degrees the thermostat promptly throws on the cooler air which is about 60 degrees and thus prevents overheating.

The direct radiators are made large enough to supply all the heat necessary down to a point about 10 degrees above zero. Below this point it may be necessary in extreme weather to run the fan a short time before occupancy and thus allow the warm air to assist the radiators for, since the rooms are not up to 70 degrees, the thermostats, of course, will throw on the warm air. This system has the great advantage of not requiring the expenditure of electric power to heat the building at any time except a few days during severe weather and, at the same time, does not load up the classrooms with an excessive amount of radiation, as otherwise would be the case. Besides individual temperature control for each room, according to its exposure and individual requirements, is obtained.

All motors are direct current motors which operate with less noise than those of alternating current type and are directly connected to the fans to avoid the use of belts. The electric lights are on alternating current which in fact is the only current available in this vicinity, and a motor-generator set has been installed to obtain direct current for the motors. A motor-generator



set is simply an alternating current motor driving a direct current generator which is mounted on the same bedplate.

In the auditorium 20 cu. ft. of air per minute are supplied for each seat but the individual control on the ducts is omitted. The temperature of the heaters is controlled in this case, since all these ducts connect into the same room and therefore do not require separate control.

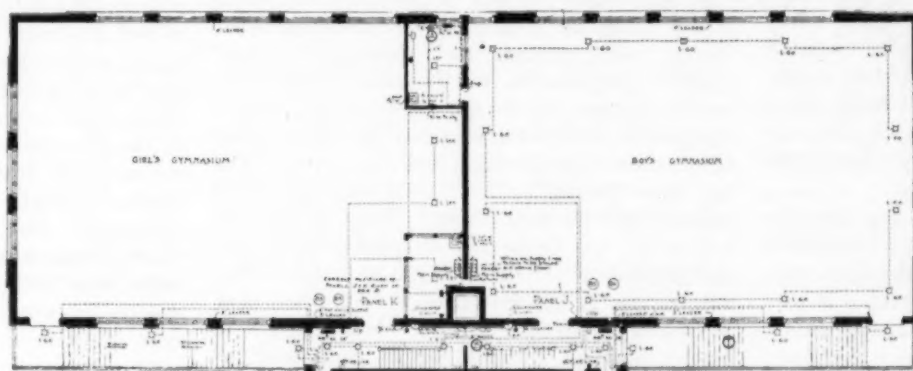
The exhaust systems consist of a separate exhaust fan complementing the supply fans in each case. The air is withdrawn from the classrooms and auditorium by ducts and flues leading to the

pent houses where the fans discharge the air out over the roof.

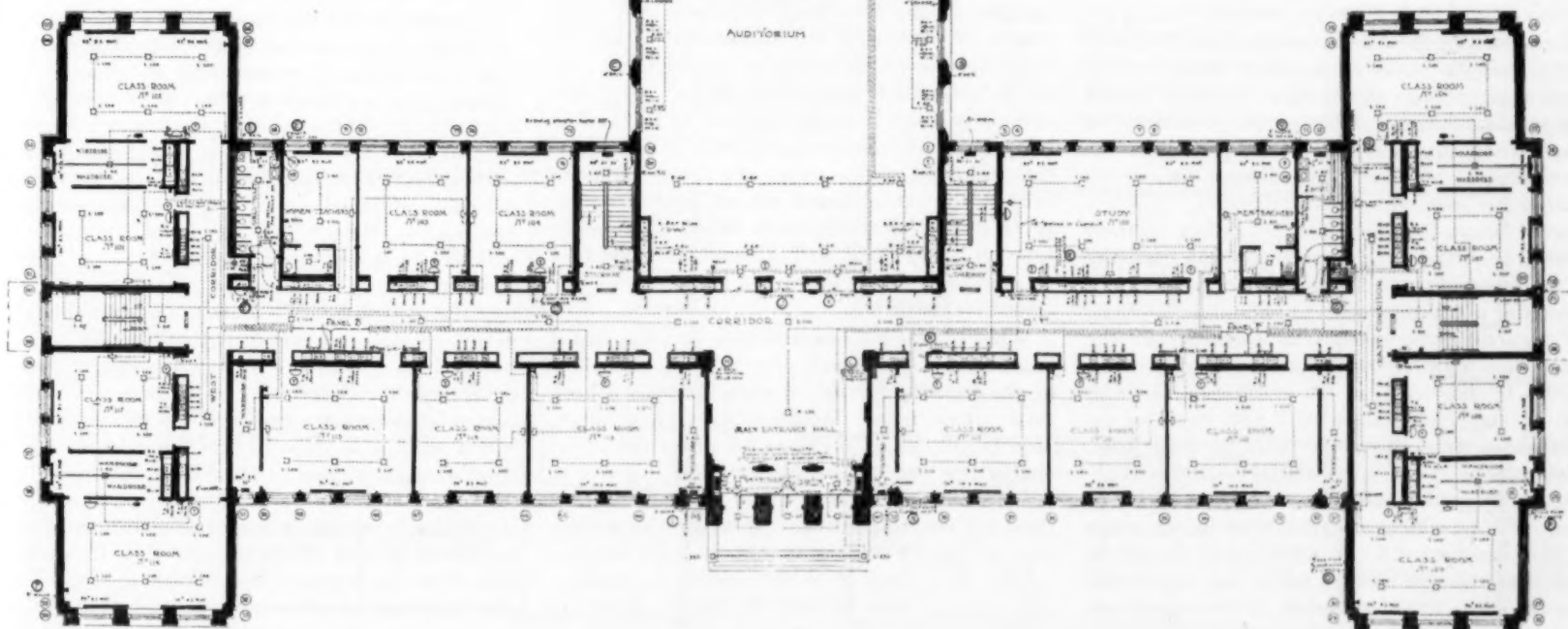
The amount of air handled consists of approximately 72,000 cu. ft. per minute to supply the classrooms and 27,000 cu. ft. to supply the auditorium, while the exhaust fans for the classrooms handle 100,000 cu. ft. per minute. The excess of exhaust is due to the fact that some rooms are exhausted without an air supply, such as lunchrooms, domestic science kitchens, etc. The auditorium exhaust fan handles the same amount of air as the supply. In addition to these there is a locker room exhaust fan han-

(Continued on Page 60)

FIRST FLOOR PLAN,
MONTCLAIR HIGH SCHOOL,
MONTCLAIR, N. J.



Starrett & Van Vleck,
Architects,
New York, N. Y.



What Will the School Board Do With Stammering?

Ernest Tompkins, M. E., Los Angeles, Cal.

The only safe course with stammering, as with any other question, is to adopt a defensible position. Up to this time the contradictoriness of the opinions regarding the disorder and of those proffering their services has made a "do-nothing" position an excuse, if not a defense for inactivity. But, regardless of the confusion in respect to stammering, two serious questions will soon make inactivity an impossibility: these questions are the exposure of the non-stammering children to the infection, and the injury to the stammering child now practiced. The seriousness of these questions may be realized from the fact that the considerable attention which educators have heretofore given to stammering has been based mainly on benefit to the stammering child—really a gratuity, for the school is primarily to educate, not to correct individual disorders. Now the situation is made grave in two ways. The educator is not only under the responsibility of harming the stammering child—one which might not cause much worry, because the stammerers are comparatively few and not aggressive for their rights—but he is also under the responsibility of exposing the whole school to a disorder, which altho commonly considered a joke is anything but that. When the parents of all small children realize that in trusting those children to the educator, they are exposing them to a disorder which may blight for life, the educator will be forced to make a change. It would be much better to change voluntarily.

Plenty of authority is available to the effect that stammering is infectious and to the effect that the oral work required of the stammerer is injurious to him. We will give only two quotations. Their reasonableness should make them sufficient. Moreover, it is safe to say that the testimony concerning these two points has never been reliably questioned.

In regard to the infectiousness, Dr. Chervin says on page 145 of "Bégalement": "Whether the imitation is voluntary, like that of the little mischiefs who mock a stammering servant, neighbor, or comrade by imitating their manner of speaking; or whether the imitation is involuntary, like that of children who live with stammerers and consequently reproduce their manner of speaking by a sort of moral contagion, it is certain that imitation plays a very important part in the production of stammering." In explanation, it might be added that it is amply attested that when stammering speech is heard it is subject to contraction both by voluntary imitation and by involuntary imitation.

In regard to the injuriousness of the oral recitation for the stammering child, Rudolf Denhardt says on page 135 of "Das Stottern": "For many stammering children the entrance in school inaugurates a significant period in the development of their impediment in which springs up new and greater dangers. The increased demands which the lessons place on their speech; the apprehension of making an exposure of their impediment before their comrades, and becoming a welcome prey to ridicule; the anxiety regarding the opinion of the teacher; the not always appropriate treatment of the stammerers by the teacher; the realization, coming first on the school bench with full force, of reduction in grade thru no fault of their own, below others of no more ability—all this combines to engender in the soul of the stammerer every feeling which contributes to the increase of his impediment." In addition it should be said that this, instead of being the experience of merely "many" stammerers, is the experience

of practically all of them with this barbarity of peaceful civilization—the oral recitation for stammerers—which humiliates them, degrades them, and drives them out of the schools doubly handicapped in the struggle for existence by a limited education and by defective speech.

Among the alternatives for the present entirely indefensible treatment of the stammerers, exclusion may appear; but, since it would have to be for life in most cases, it is out of the question.

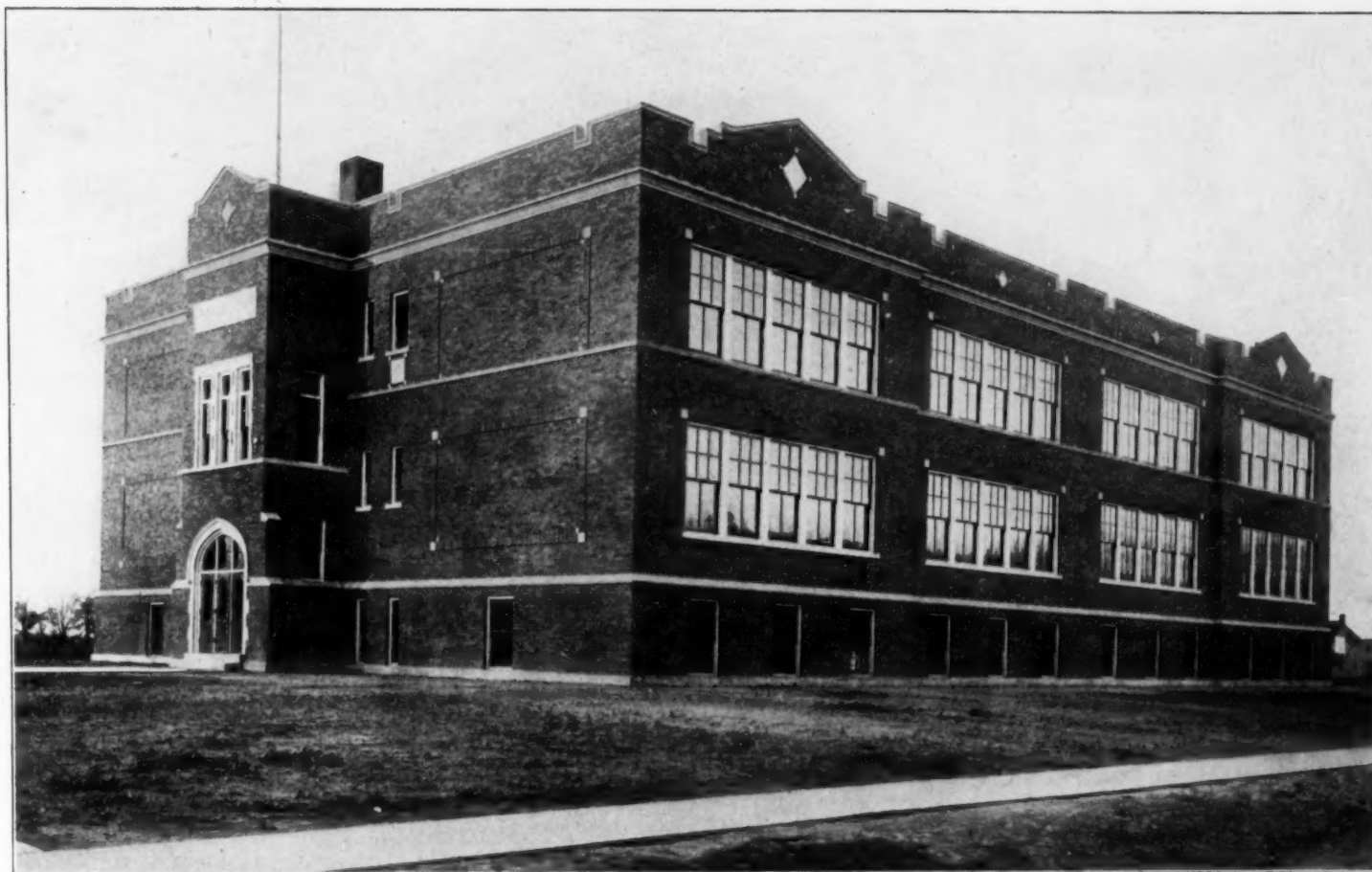
Segregation of the stammerers is advocated much and practiced some. It may consist of collecting the stammerers in one room under the care of a regular teacher or under the care of a special teacher alleged to be qualified to correct stammering. The former possibility would develop into the latter, for no intelligent teacher would fail to develop a treatment of her own if she did not have any other; so the plan may be discussed in connection with a special teacher. The plan is indefensible, no matter how much the authority and how extensive the practice, as slight consideration will show. The defense for the plan would be correction of the stammering; but history shows that thru hundreds of years the testimony to the correction of stammering has been almost universally false. Collected, there are volumes upon volumes of such testimony, sworn to, vouched for, certified by all the possible means of certification, yet now known to be mistaken. Dr. Frank A. Bryant, the well known speech specialist of New York, says, under date of 1913: "Professor Itard stated in 1817 that the treatment of stuttering" (Dr. Bryant calls stammering "stuttering") "had made no progress in two thousand years. The results attained by the specialists of the present day and the recent literature on the subject does not indicate that anything nearer a specific cure has been found." Then what are all these "cures" that we hear about? They are almost exclusively the temporary disappearance of the disorder characteristic of it and designated "intermittence," a characteristic so deceptive that no school board can protect itself against it within the time it should act on this question. As an illustration, we have heard of the successful treatment of stammering in the schools of Germany, and many have been convinced by that testimony; yet Dr. Albert Liebmann of Berlin, an authority whose word cannot lightly be brushed aside, points out in his "Die Psychische Behandlung von Sprachstörungen," published by Oscar Coblentz, Berlin, 1914, the harmfulness of the breathing exercises and other means of attracting the stammerer's attention to his speech, which means are a prominent part of the recognized school treatments. Dr. Liebmann's position is amply justified by the violent relapses which almost universally follow those treatments in private cures. In short, the members of the school board cannot qualify as experts to defend a treatment which they might take up; and they will always be subject to attack, just or unjust, by the advocates of different treatments.

What defensible position then can the school board take? Consider first the infectiousness of the disorder, for this is approximately a hundred times more important than any other. Ninety-nine school children for whom the school authorities are responsible are now exposed to infection from one for whose original malady they are not responsible. Whether the protection of the 99 is easy or not, it must be procured. But since it is the easiest to procure, why should there be any hesitation about it?

Simply prohibit stammering on school property; require the stammering child to wait and calm himself, so that he can speak fluently, or to write or make signs or remain silent. Stammering will not be contracted by conscious or unconscious imitation if it is not heard.

Consider next the serious liability of the school authorities for the injury now inflicted on the stammering child by the oral recitation. Suppose that it was the universal practice to select, say one pupil out of a hundred, one inclined to gamble, and to daily require him to indulge in that bad habit, so that his whole life and that of his close associates would be severely marred. Could the school board defend that action by which a pupil entrusted to their care for its benefit is injured for life by daily confirmation in a hateful habit? It could not; and no more can it defend the same practice on the stammering child—except to say that it has been misled. That will answer for the past, but not for the future. Denhardt's graphic description of the cruel injustice and injury to the stammering child was published at least 26 years ago. That does not make the school authorities really responsible for the mistreatment of the stammering child during the last 26 years, because that most important fact was obscured by other extensive discussion of interest to that author. This is the case almost universally: the discussions of stammering are primarily in the interest of the writers on the subject—are to promulgate a theory, or a method of alleged cure, or to obtain recognition from a college, a scientific society, or the public. For instance, a recent discussion, comprising approximately 700 pages, and making stammering to be an organic trouble affording little prospect of recovery, devotes about a couple of pages at the very last of the discussion to home remedy in childhood, the valuable feature of which is, "He must be checked quietly and gently each time that he stammers," and adds, "If mothers would adopt these simple measures, we should in a few decades hear little more of stammering." So, in practically every discussion the beneficial portion—if there is any—is almost totally obscured by the other discussion, which is not only largely erroneous on the face of it because of contradictoriness, interior and exterior, but is also harmful because it keeps the school authorities inert on the subject. It is now incumbent on the educators to discard those husks and make use of the meat; and the meat is to be found in the writings of almost every observant individual who has said much on the subject.

Consider finally the benefit to the stammering child due to prohibition of the defective speech. The prohibition of stammering at or near its inception is a remedy for it. That fact is remarkable for the extent of its support by the laity and for the extent of its opposition by the authorities. But both conditions are perfectly natural. Bluemel says, ". . . there are approximately three times as many stammering children as stammering adults. Late in childhood or during adolescence many stammerers lose the impediment." This is that authority's notice of an ever present phenomenon, mentioned in an unobtrusive way by almost every authority—the outgrowing of an immense number of stammerers, principally little girls, in which cases it is generally hastened by the parental discouragement of the habit. The scarcity of women stammerers is obtrusive evidence of it—evidence which is strengthened instead of weakened by the efforts to attribute it to immunity of the women: the prevailing authoritative opinions of stammering come under the



CHARLES ELLIOTT PERKINS SCHOOL, BURLINGTON, IA.
Eckland & De Arment, Architects, Moline, Ill.

TWO UNIT ELEMENTARY SCHOOLS

Supt. W. L. Hanson, Burlington, Ia.

The Charles Elliott Perkins and the North Hill Elementary Schools were completed and occupied in the fall of 1915. Since the structures are departures from the ordinary type of school arrangement, a description of the structures should be of interest to the educational public. The two buildings were designed by Messrs. Eckland & DeArment, Moline, Ill., and are almost identical in construction. Both are 124 feet long, 85 feet three inches wide, and comprise two school stories and basement.

There are nine classrooms with this unit feature. The classrooms are of two sizes, all being 30 feet in length; four are 23 feet wide and the remainder are 24 feet wide. They are seated with the pedestal type of school desks and at least twenty per cent of the seats in each classroom are adjustable. These rooms accommodate forty pupils each and it is the purpose of the school authorities to limit the number of students in each classroom to that number. As will be seen from the accompanying photograph there are two doors to each wardrobe so that

pupils passing in do not interfere with those coming out. The toilets are equipped with noiseless flushing closets so that the classes are not disturbed in any manner whatever when the bowls are flushed.

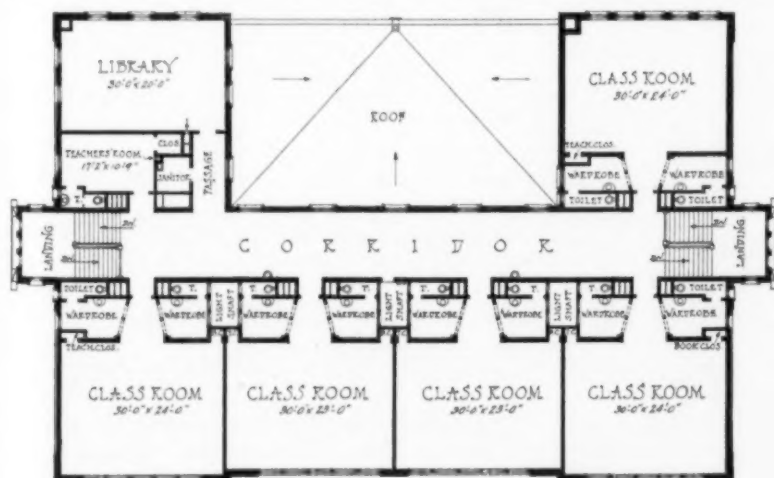
Each building has a kindergarten of the same size as one of the classrooms and equipped with separate cloakrooms and toilets for the boys and girls.

It will be seen from the plans that one of the unusual features is that of the north lighting for practically all of the classrooms. While some may criticize this system as preventing any direct sunlight from entering the classrooms, yet the unusual feature of an abundance of clear, soft light more than offsets the lack of sunlight. So far the amount of light in the classrooms has been sufficient even on the darkest day to permit pupils to read with ease, type the size of that used in the ordinary newspaper.

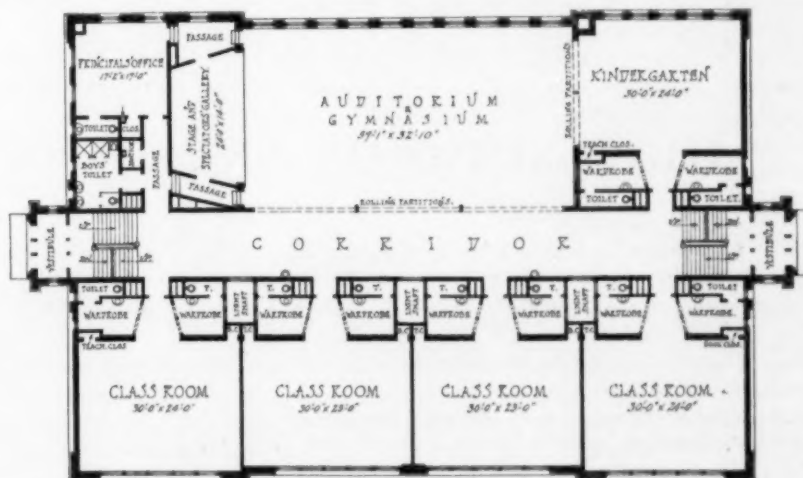
On the first floor, occupying the center of the south side of the building, will be found the auditorium-gymnasium. By a system of rolling

partitions between the kindergarten and auditorium and the corridor and auditorium, it is possible to increase the seating capacity of this room by fully one-half. Audiences of 600 people have been seated with ease in the auditorium and adjoining rooms. As the Charles Elliott Perkins School is located some distance from the city it is expected to use this building as a community center.

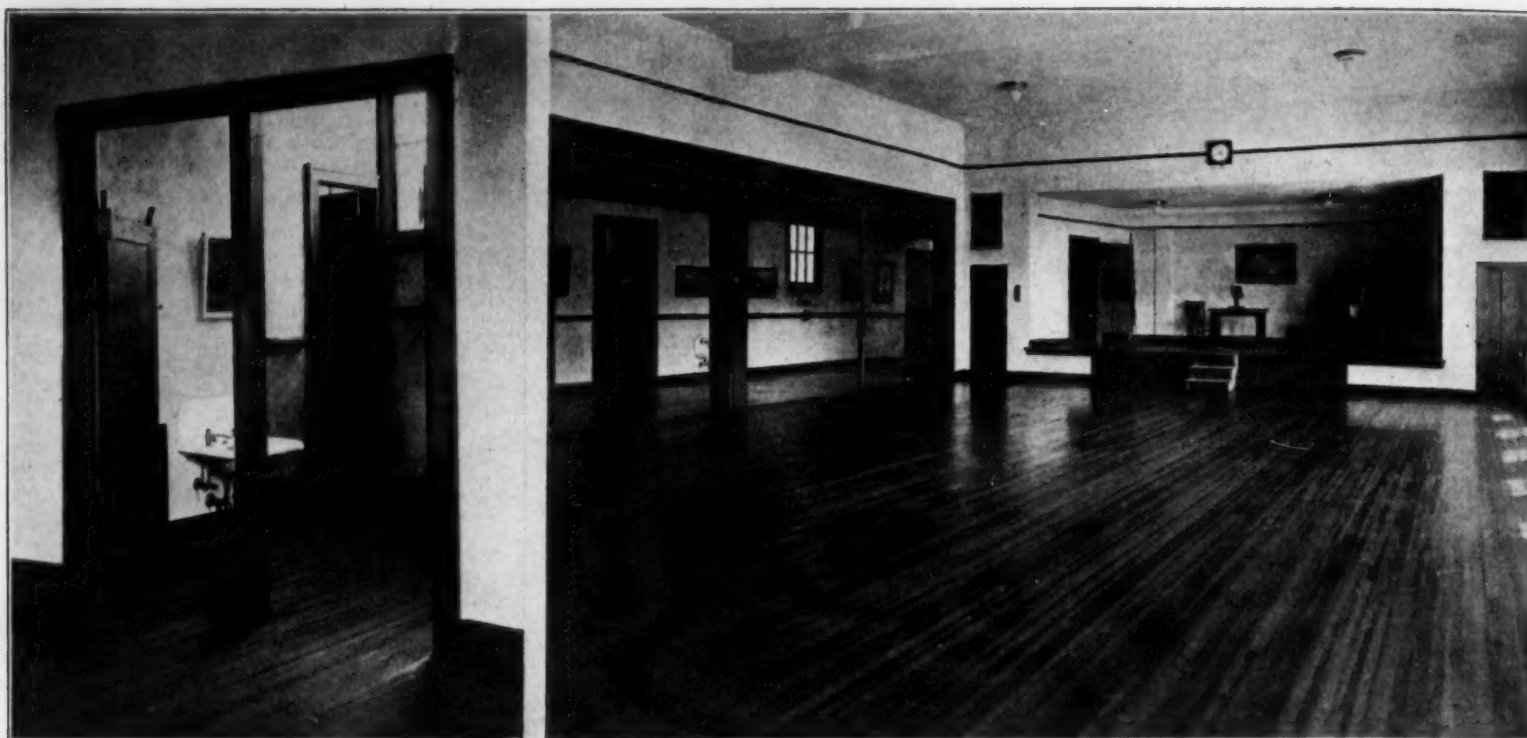
In the principal's office on the first floor is located the master clock which controls the clock system and the program system in the building. On the second floor besides regular classrooms a library and a teachers' rest room have been provided. In the basement are the rooms for the special subjects—each one equipped with modern furniture, apparatus and machinery for the teaching of these subjects. The kitchen accommodates twenty girls and the sewing room is equipped to take care of the same number. The manual training room is an unusually large room, 60 by 34 feet in size. This gives ample space not only for 24 manual training benches



SECOND FLOOR PLAN.

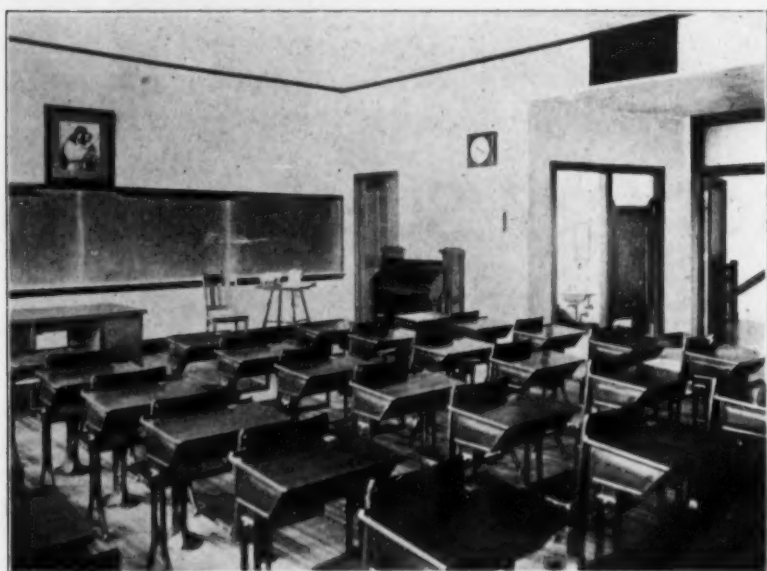


FIRST FLOOR PLAN.

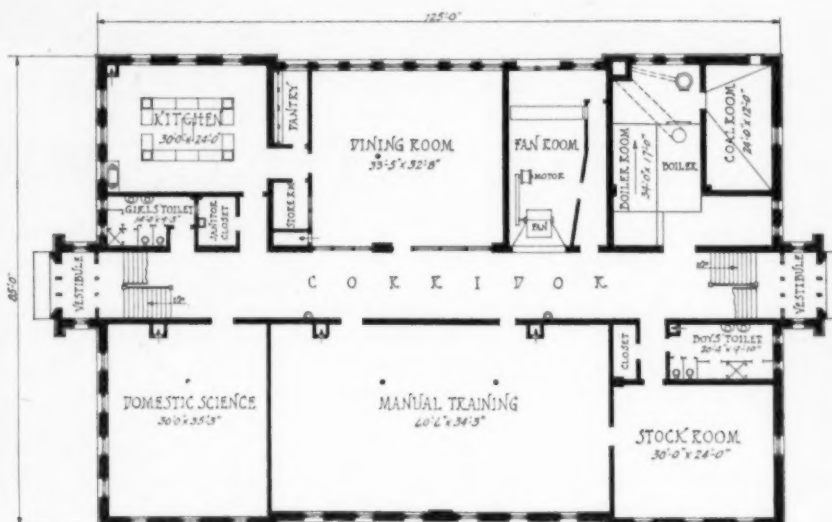


View of cloakroom showing lavatory and entrance to toilet.

View showing combination auditorium gymnasium. To the left, the rolling partitions separating the corridors from the auditorium have been raised thus increasing the seating capacity of auditorium.



View of classroom looking towards boys' cloakroom, showing double doors. Open door to cloakroom shows lavatory and drinking fountain. To the right is seen the entrance to classroom from corridor.



BASEMENT PLAN.

but for seats for recitation purposes, besides racks for the storage of lumber and for the display of work of the classes.

The buildings are heated and ventilated by a vacuum steam system of the direct-indirect type. The boilers are of the down-draft, smokeless variety and both temperature and humidity are automatically controlled. The shower baths for boys and girls on the first and second floors and the wash basins in the cloak rooms are furnished with hot water by means of special heaters located in the boiler room. A large volume-low vacuum cleaning system has been installed and has been found to keep the buildings much

cleaner than the old method of sweeping could keep them.

The money for these buildings was secured by a direct tax levied for a period of three years. The usual plan of a bond issue was not considered advisable in this case so that the buildings are completely paid for at this date.

The figures on the cubic basis show that the Perkins School cost 14.3 cents per cubic foot; the North Hill School cost 15.8 cents per foot. In this cubic estimate are included the general construction, heating, plumbing, electric fixtures, clocks, blackboards and architects' fees.

foremost school architects in the state makes it his practice to consult both principal and teachers in regard to the details of their departments before completing the plans. By securing their written approval of the salient features of their departments he forestalls subsequent changes or complaints.

Every principal's investigation and report to his board and constituents formulates itself into a triangular shape—the site, the building, the funds.

The Site.

For the past several years various educational bodies have passed resolutions emphasizing the importance of the legislature's prescribing by statute the minimum school site, to be determined by the enrollment of the school, actual or immediately prospective.

While many question the advisability of such legislation, the educational value of the campaign has already netted larger gains than is generally known. A recent investigation of the high schools which have been erected within the past ten years in this state shows that the average size of the sites of 77 of them contain a fraction over eleven acres, ranging from five acres to 25 acres. This is cause for deep satisfaction, but not for future indifference or com-

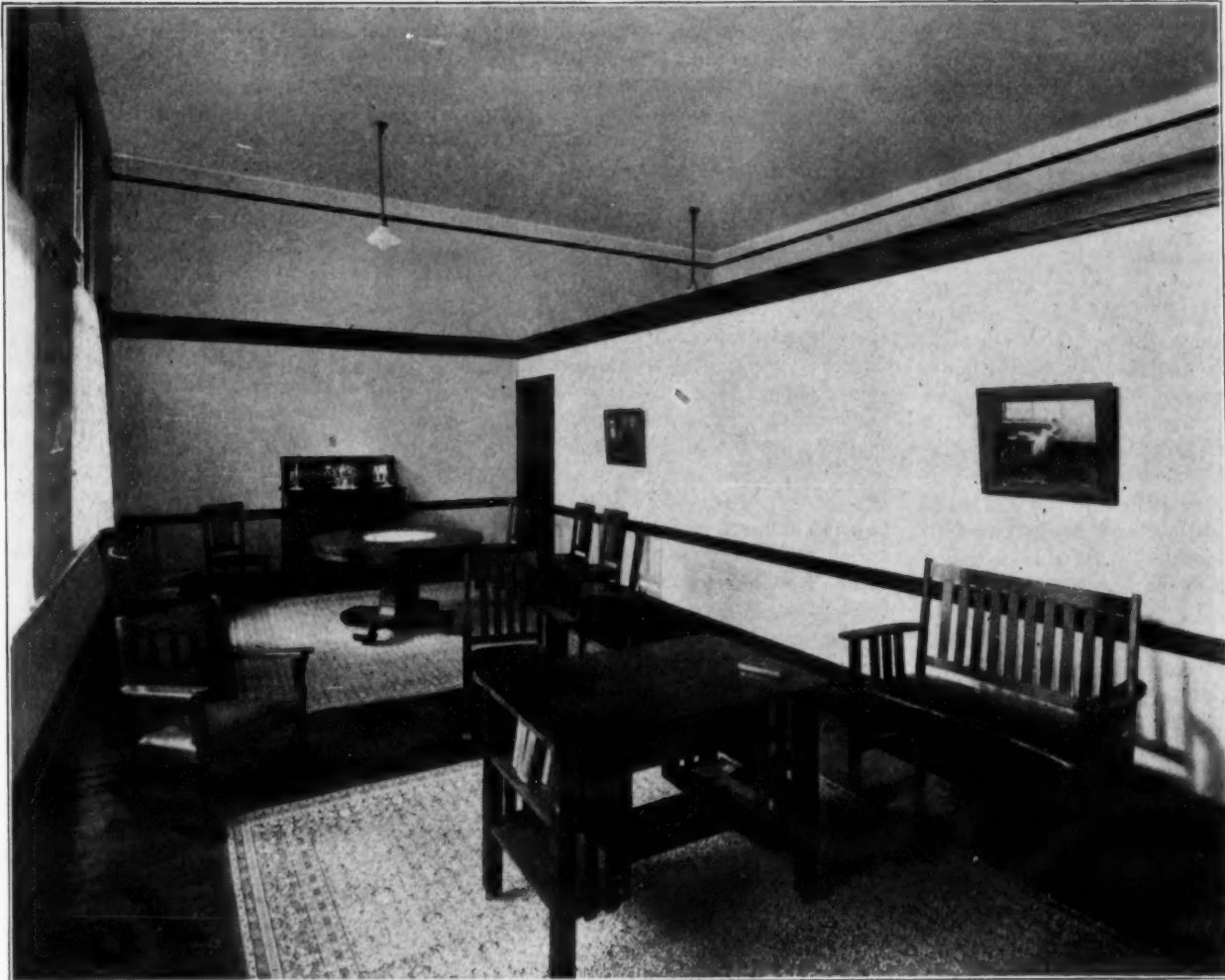
HIGH-SCHOOL ARCHITECTURE

Pertinent Recommendations of a Committee of California Schoolmen

The California high-school teachers' association received recently a report on the location and planning of high school buildings in which some significant facts and tendencies are brought out. The report which was prepared by a committee, headed by Mr. J. C. Templeton, superintendent of schools at Modesto, reads in part, as follows:

Your committee is not composed of profes-

sional architects or builders, but of principals who have felt keenly the handicaps of inadequate equipment for the work, and have been compelled to study the problem from the point of view of both teacher and principal. It is not a problem of ideal conditions, regardless of the factor of cost, but one of maxima and minima—the maximum working equipment at the minimum cost that we are working on. One of the



MODEL APARTMENT, NORTH EAST HIGH SCHOOL.

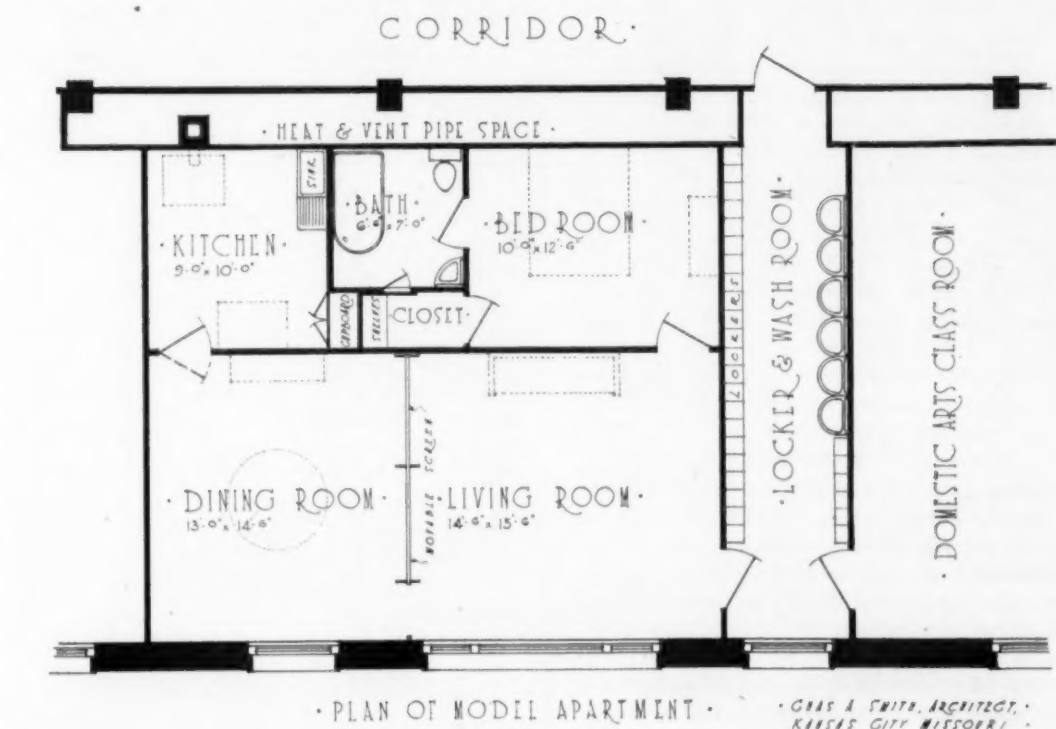
plete unconcern. We are still far from the acceptance of a minimum standard of school site of ample size for the outdoor courses and activities. We have a conviction that there is not a high school board in the state that is now planning to build to whom the size and location of the site is not one of the big questions under consideration; and the differences of opinion between the parties to the dispute are by no means all due to selfish or parsimonious motives; in most instances we believe they may be referred to radical differences in their conceptions of the purpose and function of the high school.

No high school should be built on less than a five-acre plot. If the school is not large enough to require so much at present, it will grow to it in a comparatively short time. If such growth is not probable, perhaps a mistake was made in the organization of the school in the first place, and is now continuing to be made in maintaining it. It might be in the interest both of economy and efficiency to disorganize, put the funds into transportation, and send the children to schools where there is more life, better courses, and larger activities.

While the five-acre plot is the smallest site upon which any high school should be erected, and may be taken, roughly, as a unit for schools of less than one hundred pupils, five acres more should be added to this for every additional one hundred pupils, up to approximately a 25-acre tract. An agreement among the teachers of the state on these matters, with a few good, convincing reasons for our faith, would accelerate the public acceptance.

The Location.

There are two reasons for locating the school centrally, viz.: (1) The convenience of the pupils in attending; and (2) The use of the school and grounds as a civic center. The two objections to the central location, which are gaining in force as population increases, are: 1. The expense of a central site, particularly in the cities;



PLAN OF MODEL APARTMENT. • CHAS. A. SMITH, ARCHTCT., KANSAS CITY, MISSOURI.

and 2. The continuation of the unvaried contact with crowded city conditions. It is a good thing for city children to have daily relief from the din and rattle of the street. With our transportation facilities and the legal provision for paying the bills, transportation is no longer a serious problem, and distance does not render

(Continued on Page 68)

A MODEL HOUSE-KEEPING APARTMENT.

The practical teaching of household economics in the high school is greatly facilitated by a model apartment. A splendid example of such a model apartment is to be found in the North-east High School at Kansas City, Mo. The rooms were designed and equipped under the direction of Mr. Charles A. Smith, architect of

the Board of Education, and were completed with the building.

The partitions separating the rooms are built nine feet high and are capped with a wood cornice carried around the wall. The wall surface of the room is, therefore, equivalent to that found in the average home, and may be decorated accordingly. The ceiling height of the rooms is fourteen feet and is sufficient to admit light and air to the kitchen and the bedroom over the top of the partitions.

The movable screen is used to separate the dining room from the living room. The screen is removed when the room is to be used for special occasions, as for example, when the domestic science room prepares a model lunch for the high school faculty or for the members of the board of education.

THE AMERICAN School Board Journal

DEVOTED TO
Legislative and Executive School Officials
WILLIAM C. BRUCE, Editor

EDITORIAL

A GOOD PLAN.

The business manager of the school board in an Illinois city—to be specific, Mr. R. H. Kinkade of Decatur—worked out during the past year, a plan for bringing the school plant to a satisfactory degree of safety, efficiency and economy. A comprehensive scheme of renovation of all the old school buildings in the city was made by him and careful estimates were prepared of the moneys which would be available to make the absolutely necessary repairs and to do the repainting and cleaning, and for such further improvements as seemed most desirable. Practically the entire year was taken to formulate a comprehensive scheme.

During the spring this plan was developed into carefully worked out programs for individual buildings and for various classes of work, and contracts were let before the close of the school year. With the help of the several school janitors, each working in his own building, every structure in the city was gone over thoroly and cleaned from roof to sub-basement. Necessary painting and varnishing was done, plumbing equipments were repaired, heating and ventilating systems overhauled, woodwork and floors were cleaned and repaired, etc. In one building thirteen furnaces were pulled out to make way for a steam heating and ventilating plant.

At the close of the vacation season the entire membership of the board of education and such city officials as have direct relations with the enforcement of laws governing the condition of the school plant, were taken on a tour of inspection. The trip which lasted practically all of one day, was not intended as an admiration junket. The members of the school board, the city health officer, the building inspector, the fire marshal and others were asked to frankly criticize and to make definite suggestions for further improvements. In the case of each building, definite figures were given by the secretary to show how much money had been spent for the individual items of repair.

The trip gave the school authorities and the city officials a very comprehensive idea of the condition of the school buildings and of the character and amount of work done under the direction of the school-board business management. The plan is one which offers considerable opportunity for imitation, involving as it does, the elements of wise planning for the future and personal knowledge (and responsibility) on the part of both the board of education and the municipal authorities.

TWO TYPES OF SCHOOLMASTERS.

A recent issue of the Wisconsin Journal of Education classifies schoolmasters, particularly superintendents, as being either of the professional or of the social-political type. The point is made that the former type which bases its work on professional preparation and professional ability deserves first consideration in the choice of school officials. The superintendent of the truly professional type is a man who relies almost entirely upon his knowledge and skill in organizing, supervising and teaching, backed by a firm foundation of academic knowledge of the sciences of psychology, sociology and pedagogy.

The second type of schoolmaster is to be generally avoided because he lacks a deep knowledge of the fundamentals which make for success in education. He is quite generally a man of good physique and address. With a suave, winning manner he holds his position by reason of his ability to manipulate men and situations. The political type of schoolmaster is generally more concerned in keeping a situation in hand than he is in providing the best possible education for the children.

It is hardly possible to classify any one superintendent as an extreme of either of these types. The day has not yet come when the American school superintendent can be of so austere a professional type that he overlooks altogether the social and political factors which help men in public life. We have seen the type but the men have never remained in office for any length of time or have exerted anything like the influence which they might be expected to possess. Mr. Thos. W. Churchill of the New York Board of Education, in an address before the Department of Superintendence, put it well when he said that in his estimation a school superintendent must, first of all, be a *man*—a man with red blood in his veins. It is well to insist upon the professional qualifications of the superintendent and to demand that he have a burning desire to teach children. But it is essential that he have in no small degree social and political qualities which will make it possible for him to realize his professional ideals, to apply his professional knowledge in overcoming obstacles of indifference, ignorance, selfishness and of those other influences which make up our complicated public life so that the children will be educated to the best advantage of the community.

THE COUNTY SUPERINTENDENCY.

Of the numerous offices which the voters of the nation are to fill, or rather refill, at the November elections at least two important offices will be submerged under the wave of partisanship that accompanies a national election. And both these offices have no relation to, and should remain unaffected by, national and state questions. They are the state superintendency and the county superintendency.

Wonders could be worked in raising the standard of rural education if these offices, particularly the latter, could be removed from the realm of politics. The least that can be done in the present month, preceding the election, is to agitate for the impartial consideration of the merits of each candidate for the office of county superintendent on the basis of his personal efficiency as a teacher and supervisor, upon his educational leadership, upon his program of educational and social reform for the rural communities.

School board members and teachers can here render a distinct service as individual citizens by arguing for the obliteration of party lines and by standing publicly and earnestly in favor of the best man in their respective communities.

TAKING THE COMPLAINTS.

The school board in a southwestern city recently experienced difficulty in persuading one of its members to accept the honor of the presidency. Two of the men who were nominated summed up their reasons for declining in the sentence: "The president has to take too many kicks." Both were unwilling to have a great number of petty details and minor troubles of the school system loaded upon them during their busy working or leisure hours.

No school board should expect its president to bear more responsibility than the law confers upon the office. The custom of bringing to the president school business of all kinds is a re-

maining vestige of the days when school boards chose teachers and fixed courses of study and when the superintendent was a mere clerk with little power and less authority and initiative. It is further an infallible sign of poor balance between the executive officers of the schools and the board and it indicates a lack of understanding of the relative legislative functions of the board and the executive and judicial functions of the superintendent and the business manager.

The difficulty can be obviated in a very short time if the president refers all complaints of an educational nature to the superintendent and all complaints on business matters to the secretary. It will not require many months to get teachers and parents to understand that the superintendent is supreme in his department and that the board as a body is only the court of last resort.

School boards should make themselves and their presidents immune from the "kicks" and minor details of the school administration so that they may devote their largest energies to the formulation of general policies and to the financing of the school system.

SCHOOL BOARDS AS BORROWERS.

Someone has classified borrowers in two great divisions. The first division includes the man who is growing financially and who desires a loan to help him advance in the establishment of a business or the acquisition of a home, or a farm. This type is most frequently found in the building-and-loan associations and it is characteristic that he provides for monthly or yearly payments of his loan. He is anxious to increase his equity in the business or property which he possesses and after a term of years holds it free of incumbrance.

The second type of borrower usually obtains his loan for a period of years, with the expectation that he will, in some hazy, indefinite way, pay it off in the dim, distant future in a lump sum. This man most frequently obtains an extension of the loan and it sometimes happens that the debt will outlive the business or the building upon which it is made.

School boards are in many respects like individuals and as borrowers may be classified like individuals. The wise school board understands that the function of a school bond is to pay in cash for a permanent and necessary school improvement and that it should be retired on an installment basis as the building which it covers is being used. The improvident board most frequently issues bonds on a long term basis and hopes to pay for them in a single sum. This type of school board is content to receive two per cent interest for a sinking fund while it pays four or five per cent on its outstanding bonds. And it happens too that this type of school board will issue new bonds to retire old ones and will pass a debt on to future generations for a building which has been worn out and discarded years ago.

School bonds are only justifiable and economical when they are issued on the installment or annuity basis and when the total term for which they will run is well within the life of the improvement which they are to cover. The school board which is increasing its bonded indebtedness out of proportion to the growth in the school population and the assessed value of the community is heading for disaster. It is unworthy of public confidence.

BUSY MEN ON SCHOOL BOARDS.

It is a strange anomaly that busy men and women make the best school board members. As a Cleveland school-board member recently said: "Men who are very busy are to be pre-

ferred, because they will devote more time to the work than others."

An Illinois editor commenting on this fact says:

"Habitual leisure is a result not of conditions or chance environment, but of qualities and characteristics. It is laziness. The man who is not busy with affairs of his own will not get busy with affairs of the public. The mainspring of enthused energy that is weak in the one case will be weak in the other.

"The man of leisure is mere rotting driftwood.

"Understanding, judgment, tact, intuition, to be true and clear, must have activity at the fountain-head, just as the streams that are purest and coolest come of never-ceasing springs.

"Idleness in itself is a disease that causes a man's powers to atrophy and rot away.

"All men who have acquired that precious treasure, the habit of incessant industry, have also learned how to economize and improve time, and the more they value time, use it and economize it, the more amazingly plentiful it becomes.

"To him who rightly appreciates and uses time there is always enough, but never any to waste."

FORESIGHT IN LOCATING SCHOOL-HOUSES.

Prof. Charles E. Merriam who as a member of the Chicago Common Council, has been responsible for a number of constructive municipal ordinances and wholesome civic policies, has recently suggested a plan for economizing in the purchase of school sites. Alderman Merriam would, in brief, require the owners of every new subdivision of the city to reserve ground for a school and playground center. For the privilege of platting a given acreage of land, the owners would donate a site sufficient to locate a school and play center, and the city would save the cost of purchase at a later date when the erection of apartments and houses has greatly increased the value of the land. The early location of the school site would ensure school privileges and would encourage purchases by prospective home builders as well as enhance all of the land values. The original owners would thus sustain no direct loss in making an enforced conveyance to the city.

Prof. Merriam's proposal is in line with legislation for intelligent city planning and is no more restrictive of private rights than the property and building regulations which the larger cities are adopting.

Every city is now paying for mistakes in locating schoolhouses and in purchasing sites which are too small for school building and play purposes. Hardly a city of any size can be named which is not making biennial or annual appropriations for enlarged sites for existing schools. In every such purchase property values have risen from one hundred to one thousand per cent. Even in outlying neighborhoods sites have doubled or trebled in cost. The people are here being penalized for the lack of foresight of their school officers. They are paying to private owners great amounts for values created by the communities as a whole.

Prof. Merriam's suggestion deserves to be studied by school boards generally and to be enacted into state laws and city ordinances.

GOOD ECONOMY?

On the plea of offering a fine manual training equipment without cost, an Eastern premium house is advertising for teachers in country districts and small cities to sell its household products. The teachers and their pupils are asked to sell soaps and other home neces-

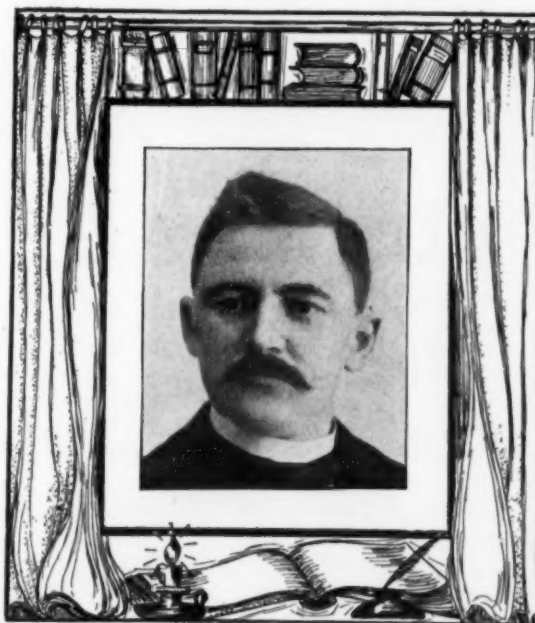


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sities, and in return for their efforts the firm offers to send a manual training bench and a small equipment of tools.

There is no economy in such an arrangement. If a manual training equipment is worth having in a school it is worth paying for directly. While it is true that an equipment obtained thru a premium house is not paid for by the school board and is not included in the current tax levy, still it will be paid for, and dearly paid for, by the people of the district who buy the toilet and household articles. There is much truth in the saying that "there is nothing free." It is certain that the cost of articles sold by a premium house, if bought from a regular firm which makes standard trade-marked goods, would have been less than the amount charged by the premium concern and in addition the quality would have been better. The difference in cost and quality between standard goods and the goods sold by premium houses more than offsets the value of a manual training equipment which is given free.

The merchant who gives a gratuity with his merchandise invariably considers the cost of the gratuity in the amount which he charges for his goods. The consumer is not the beneficiary, but is more frequently the victim of a fraud accordingly as the merchant is able to offer an attractive premium and to conceal the inferior value of the necessities which he sells. If a school subject is worth having, it is worth buying equipment for in a legitimate manner.



C. F. NEWKIRK,
Manager Educational Department, Rand,
McNally & Co., Chicago.
Died, Sept. 19, 1916.

THE DOCTOR VS. THE PROFESSOR.

Not many decades ago the title "professor" was the aspiration and pride of every coming schoolmaster. In time, however, the title so cheapened itself that, outside the legitimate sphere of the University, it has become the humorous designation of the band leader, the boot black, and the dancing master. Today the "professor" examines cranial protuberances or pares corns. He gives performances of legerdemain or exhibits skill in the tonsorial art. The "professor" is everywhere in the mind of the man on the street except in the college or the university.

The aspiring schoolmaster has in the meanwhile acquired a new appellation of dignity. He is now a "doctor" and insists with dignified firmness that he be referred to as such. At educational conventions he is mortally offended if he be not addressed as "doctor"; when he writes an item to his state teachers' paper to record the wonderful news of his re-election for another year with an increase of \$25 in his lordly salary, it is "Doctor Blank who has consented to remain another year at Blankville." When he addresses the teachers' institute in the neighboring county, he will be depressed a fortnight unless he is referred to not less than a dozen times as "doctor" by the colleague who introduces him. His teachers are sure to receive a rating of "inferior" if he should overhear them casually refer to him without the "Doctor" before his euphonious name.

In the words of the poet we may ask in all sincerity: "What's in a name without a handle?"

AND SCHOOL BOARDS TOO!

Several weeks ago Dr. Albert Shiels, newly elected superintendent of the Los Angeles, Cal., schools, told the members of the local municipal league:

"In general, an organization of this kind functions most successfully to the degree that it acts impersonally; that is, that it seeks neither to promote nor destroy the fortune of individuals, and also to the degree that it concerns itself with the larger aspects of education, and not its puerile details."

School boards may well adopt such a policy. It is the only sure policy for efficient administration by laymen.

"Teachers deal too much in the negative side of a child's nature, trying to find out what it can not do and does not know, when there is a rich field in discovering what the child knows and can do. Many a child is turned out a failure, who can do worth while things which the teacher has failed to find. There is sufficient good in every boy and girl to save them, if the teacher brings the right forces to bear at the right time in the right way."—Supt. John H. Francis, Columbus, O.

The New York board of education is asking for \$42,612,439 for the year 1917, an increase of nearly two and three-quarter millions over the current school year.

Common sense in educational theory is a paradox. It is so uncommon.

Theory and practice in education are somewhat different as any young teacher can tell you.

A national authority on city promotion considers backwardness of a school system a distinct drawback in the commercial and industrial development of a community. The progressive character of the school board, he says, is an index to the efficiency of the schools.

Seeking a Superintendency

By a School Board Member

Some years ago, when our board of education spent six weeks seeking a superintendent, I felt that I had learned about all that that painful experience could teach me, but a recent repetition of the process has given me a post graduate course and, with all the zeal of a new convert, I hasten to let my light shine upon my fellow board members.

A number of possible applicants were mobilized in our immediate vicinity—near us is a university whose summer courses are especially attractive to schoolmen—but, even at that, the promptness of the attack was such as to bewilder us and make us suspect telepathic sources of information. Two men arrived before our board knew that our former superintendent was to resign and it cannot be denied that this early arrival was a distinct advantage. If the position be at all attractive, the applicant of the third or fourth day is likely to find himself one of a procession, while the proverbial early bird, has with less work and possibly less personality, already made a distinct, individual impression.

Engaging personality, I have discovered anew, is a priceless heritage, an often welcome substitute for degrees, recommendations, experience. We had one applicant—but that story might sound like a criticism of my associates and I was almost as much a victim to the charm of that particular personality as were they.

Another of my new lessons was that a man's advantages may, in certain situations, work to his detriment. We had, for instance, one applicant who in acquaintance, familiarity with local conditions and experience stood head and shoulders above all the others but he had just been connected with a larger school plant than ours and at a larger salary. "Why," was our first question, "is he willing to come to us?" And when that question had been satisfactorily answered, it was at once followed by, "But, if he does come, can it be for more than a year or two, at most? How can a man of his ability afford to remain here at the salary we are able to pay?" The applicant in question suspected, I think, that his age militated against him (he was still on the sunny side of fifty) but I am convinced that this had nothing to do with it. He was hurt by the very things that under other conditions would have helped him: his ample experience and his having commanded a reasonably high salary.

Twice have I had it re-impressed upon me that nothing can take the place of a visit to an applicant's home town. In no case were our representatives able to learn anything to the serious detriment of a candidate but they found

men who would "knock" savagely, which is something almost impossible if one confines himself to correspondence. The knocker may be—in one case he was—a foul-mouthed ignoramus but even then his opinion is apt to be not wholly without value; for the fault which he magnifies and megaphones usually has some, at least microscopic, basis in fact. And, by the same token, you never know a man's virtues until you have talked with his friends and neighbors, teachers who have taught under him and boys and girls who have gone to school to him. It was the story of a school fight, a story learned not from him but from members of his board and his community, which, when re-told to our board, proved perhaps the best asset of one of our candidates.

Finally, I was impressed anew with a paradoxical feature which I first encountered years ago when on a committee seeking a pastor for a local church: namely, the commercial value of disinterestedness. The man elected was not the man who worked the hardest for the position, his letters of recommendation were not the best and he did not have them in the best shape for presentation. A letter three or four years old, for instance, written by a friend to the board of a city in which you have never taught is an evidence that you tried for a position that you did not get: a fact in no wise discreditable, to be sure, but one which it is at least unnecessary to tell to prospective employers. But what our successful candidate did have was such a consuming enthusiasm for teaching that he managed to convince all of us that he was far more interested in doing good work than in drawing a large salary.

Other applicants before our board had talked ten or fifteen minutes apiece about their experience, their qualifications, their ability and had done it genially and, withal, modestly. He talked two minutes about himself then, for twenty minutes, as fast as he could put words together, he told us his views about what a school ought to be and do and the extent to which he felt that he had in the past been able (and unable) to approximate to these standards. It was, I think, the incandescent enthusiasm which this talk revealed that "clinched" the matter and gave him the position. Only—by way of warning—the disinterestedness of which I speak is something that, to my mind, cometh not save by prayer and fasting, it is quite as much a gift of grace as an engaging personality. It is, at least, not a thing one should light-heartedly attempt to counterfeit; the amateur had better begin with counterfeit bank notes.

Another father, more far sighted, encouraged his son to build a shop of his very own and provided a complete set of the very best tools obtainable, of a size and kind suitable to the strength and need of the youngster, who, today is an inventor of no small fame.

It is now generally conceded that in anything having to do with development of youthful minds and bodies, the best is none too good. Never has more serious consideration been given to education, in all its phases, than at the present time, particularly to elementary branches, including vocational guidance. It might be well to consider the elementary school as an institution where children are furnished tools with which to acquire knowledge, while the high schools and colleges provide the knowledge which can only be acquired by making use of the tools furnished in the elementary grades.

Shall those tools be of the toy type commonly found in a boy's tool chest, or of a practical and standard make? Considering elementary textbooks as tools, let us ascertain where and how to draw the line between the superior and the inferior.

There is today a plentiful supply of standard textbooks recognized by competent educators as par-excellent. They are the result of the best thought and study of renowned authors, subjected to the keenest criticisms of a corps of eminent educators, and produced by skilled workmen under the supervision of publishers of wide experience.

Because of extensive competition under economic necessity the publishers are obliged to select that which will most strongly appeal to the instructors and administrators of the schools. Mediocre material could not be marketed over their protest; so long as competition exists. The elimination of competition thru state publication of school textbooks, as advocated by certain agitators, does not result in bringing out the best at the lowest possible price, but rather in a compulsory, "straight jacket" set of inferior textbooks, selected and published by state politicians.

That it is impossible to procure the best, either in authorship or workmanship, thru state publication has been demonstrated both in this and other countries. It is not due to the elimination of competition, alone, that the product of state printing plants has proven mediocre. Politicians, in their desire to make a record for cheap publications, oppose the frequent revision of texts, which is necessary in order to keep up with the march of events; they necessarily purchase stock in comparatively small quantities and often, thru lack of technical knowledge accept poor quality; because of inexperience in this highly specialized industry on the part of the mechanical force, their productions are not only mediocre, but much less durable than volumes manufactured by experts.

The advocates of state publication of textbooks seem to have overlooked the fact that cheap books are the most expensive in the final summing up. They should realize, as does an intelligent housewife, that slazy or shoddy material of any character is not only short lived but is much less satisfactory while in use than are the better grades. Shoddy always tends to demoralize.

One of the duties of educators is to bring out that which is best in a child—stimulate high endeavor. Poor typography, cloudy illustrations, poor paper and shabby bindings retard rather than stimulate, just as dull tools discourage. Whether they be tools for toy-makers or tools for tutelage, the best are none too good.

TOOLS AND TUTELAGE

The Best Are None Too Good

Any one who has ever examined the contents of a child's tool chest, or tried to make use of the equipment in an emergency will agree that dull hatchets and soft saws are not at all adapted to practical shop work or even odd jobs. They certainly do not inspire the user with a desire to construct anything, either of useful or ornamental character.

Of what real use then, are such tools? If they are not productive, are they not likely to prove destructive, not only of material but of creative impulse?

There comes, eventually, a time when young people are expected to take up various tools and

make use of them in a practical manner. What opportunity and preparation have they had to meet this inevitable demand? What incentive and encouragement, either in the school or in the home?

It is a wise father that knows his own son and recognizes his needs. Two striking instances will amply illustrate this assertion: One father took undue precaution to keep his tools carefully locked up. His young son managed to climb into the tool house thru a small, high window and abstracted suitable tools with which to construct a sled. The boy was severely punished and his initiative was tragically crippled.



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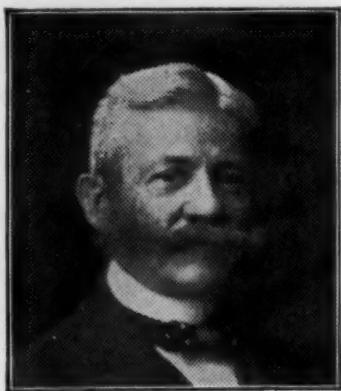
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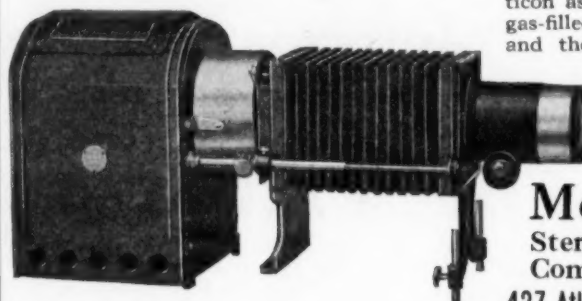
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School Administration as a State Function

Dr. Thomas E. Finegan

What I regard as one of the great fundamental principles of school administration in this country is that public education is a function of the state and not a function of a municipality or of any local division of the state. It is upon that principle which every school system of every state in the country has been founded. Whenever that principle has been challenged in any state of the Union and the courts of the state have had the opportunity to pass upon the question they have weighed the question and held that education is a function of the state and not a function of a locality.

No one can point to a single decision of a court of final jurisdiction in any state in this Union which has held to the contrary.

Now, what is meant by education being a function of the state? Do we mean that the state is to put itself in place of the locality and that the State is to dominate the administration of public education in a city or any other section of the state? That is not it at all. It means that the controlling power in public education shall always be reserved to the legislative power of the state and the locality may exercise such powers as are delegated to it by the legislature.

Let me give you an illustration of what I mean by public education being the function of the state and not of the locality. A few years ago in a city in one of the states of this country there was what is known as a bi-partisan board of education. Now that sounds good—bi-partisan, equal representation in public education of the two great parties. Why think about rep-

resentation of parties on a board of education? Why should parties as such be given representation upon a board of education? We have no business to take into consideration the question of parties when we are determining what the personnel of a board of education shall be. We are to take into consideration just one thing and that one thing is, what is for the best interest of the children of the state? Now they did have on the board of education in that city representation from both political parties. There were four men on the board—good men—two Democrats and two Republicans—and they sat down to select the teachers. There were only ninety teachers in that city. These four men intended to do just what was the absolutely right thing for the people of their city, and so the first teacher chosen was taken from the Democratic faith and the next teacher chosen was taken from the Republican faith, and so they proceeded. In this way each of the two great parties had equal representation in the teaching force. There were 45 teachers taken from the Democratic families and 45 from the Republican families, and the board of education believed it was discharging its faithful obligation to the people of the city because it was a bi-partisan board of education.

That worked very well for two years, but the city grew somewhat and it soon became necessary to appoint 91 teachers. The board convened to make their annual appointments and they proceeded tentatively to assign one teacher to the Democrats and one to the Republicans until they had ninety appointed. The board

then proceeded to appoint the 91st teacher and the Democratic representatives said: "Now we carried the election last fall, we elected the Mayor, and we think we should have this additional teacher." And the Republican representatives on the board said: "That is very true, but we have carried the election four times out of five; therefore we are entitled to this additional teacher."

The board could not agree upon the appointment of that one teacher and so it decided not to appoint any teachers, and no teachers were appointed. The first of September came and the schools were not opened; the middle of September came and the schools were still closed, and on the first day of October the compulsory attendance law became operative. There was a State law which directed that every child in the State of school age should be under instruction on October first. Under such law, it was the duty of the municipality to provide for the instruction of the children from the first of October until the end of June, and for failure to do this penalties were imposed. This board could not agree and the head of the state school system had given notice to the board of education that if the schools were not opened on the first of October he would appoint teachers and see that the schools were opened and properly administered.

On the first of October the commissioner of education of that state appointed a temporary superintendent of schools, ninety-one teachers, attendance officers and janitors, and the schools were opened. The board of education challenged the legality of the power thus exercised by the commissioner of education and applied to the supreme court for a writ of prohibition to restrain the commissioner of education from per-

Extemporaneous address before Department of School Administration, N. E. A., New York, N. Y., July 6, 1916.

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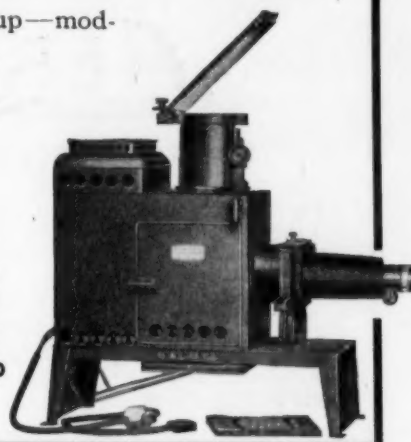
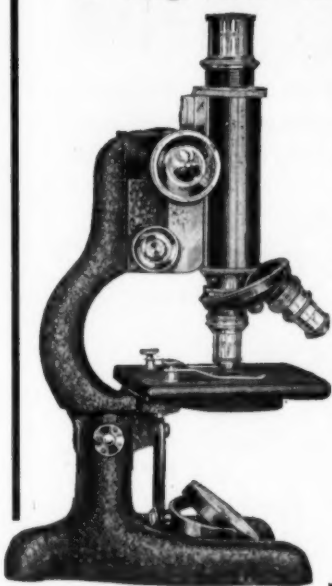
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forming such function. The court held that the commissioner was not only within his constitutional rights but was obeying a mandate of the constitution adopted by the people, which required the maintenance of a system of free common schools wherein all the children of the state should be educated, and that it was a question of interest to all the citizens of the state as to whether or not there should be 5,000 children in any city of the state deprived of the privilege of attending school. The state was bound to protect every child in its right to an education.

The law of the state makes it the duty of every locality to supply the personal staff necessary for the operation of its school system, and when any community fails to meet such obligation the state possesses the power to take such action, unusual as it may be, to open and operate the schools.

There are questions coming before the public continually in all sections of the country which involve this principle. In many of the states educational measures have been before legislative bodies which, if enacted into law, would contravene this principle. The assaults which have been made upon school systems, by forces in no way responsible for the management of schools, for the promotion of selfish interests at the expense of the schools make it necessary that educational administrators, who know the evils which will result from the abandonment of this time-honored fundamental American principle of school administration, shall insist upon legislation in every state which shall preserve the independence of officers charged with the administration of public education.

A few years ago I was asked to speak before the educational committee of a legislature where

this question was under consideration. In that instance the state had prepared a bill to reorganize the school system of its cities. A bill applying to one city was also introduced. This bill had been prepared by the corporation counsel under the direction of the mayor, and I want to tell you some of the essential features of that bill, and see whether or not you would be willing to substitute the principles on which it was based for the great fundamental principle on which the school systems of the several states in the union have been founded.

The first important feature of that bill was to abolish the board of education and to provide that the mayor of the city should be ex-officio the board of education. The bill further provided that the mayor should be given the power to make annual contracts with teachers; that the mayor should have the right, at his pleasure, to discontinue contracts; that the mayor should have the right to purchase all kinds of supplies used in the school system; that the mayor, as the ex-officio board of education, should be given the authority to let all contracts for repairs of school buildings and for the construction of new buildings. The mayor who had this bill prepared went just a little further than any man I have ever known, in attempting to devise a scheme for the administration of a public school system, and provided that he, the mayor, should further have the power to examine and license teachers.

Now I submit to you, is there any person in this room who believes that there should be written upon the statutes of any state a law which provides in effect that a local officer shall have the absolute control and jurisdiction of the administration of the school system and substitute the principles involved in such legislation for

the principle that education, being a state and not a municipal function, shall be administered by the local officers who are independent of municipal authorities?

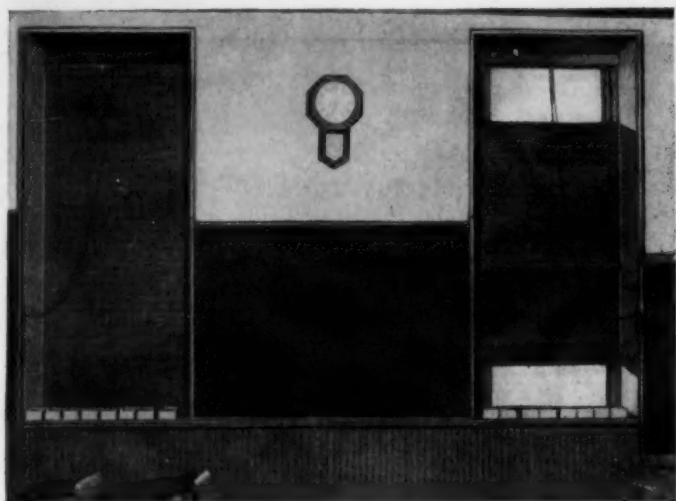
The several states have universally reserved the power to determine the general policy of public education but at the same time have recognized the principle that local authorities be given the power to administer such policy within the limitations imposed by the state thru legislative enactment.

A MANUAL TRAINING BUILDING.

The manual training shop at the Riverview Union High School, Antioch, California, is a very tangible result of two educational needs. The first of these needs was the additional workshop space for the manual training department which thru the growth of the school had become very much overcrowded. The school board, at the same time, was not able to pay for the erection of a building designed and erected in the usual manner by local artisans. The second need was practical training in actual building construction which the director of the department, M. Geo. H. Cater, felt that his students of woodworking required.

The building is 32 by 60 feet in size, two stories high and affords a total of 3,800 feet of floor space for shop purposes. It houses the first-year class in woodworking, the second year in woodworking, the repairing and woodturning classes and the fourth year of machinework. The third year of forging will be housed in a separate structure to be erected later.

Every bit of the work connected with the construction of the building was done by the boys under the direction of Mr. Cater. The original plans were drawn by boys; the framing was



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planned by a group and every bit of the construction and painting was done by them. Groups of twenty boys each worked each day, from the first of October, until February, for two full shop periods. From February to June first, groups of twenty boys worked one-third of the time on the building and two-thirds on the furniture.

The plan is exceedingly simple and the arrangement of the machinery, etc., follows the best factory practice. A glance at the plans on this page will give a clear idea of the arrangement.

The building is placed on a continuous concrete foundation, planned and set by the boys. The ground floor has a cement footing for the

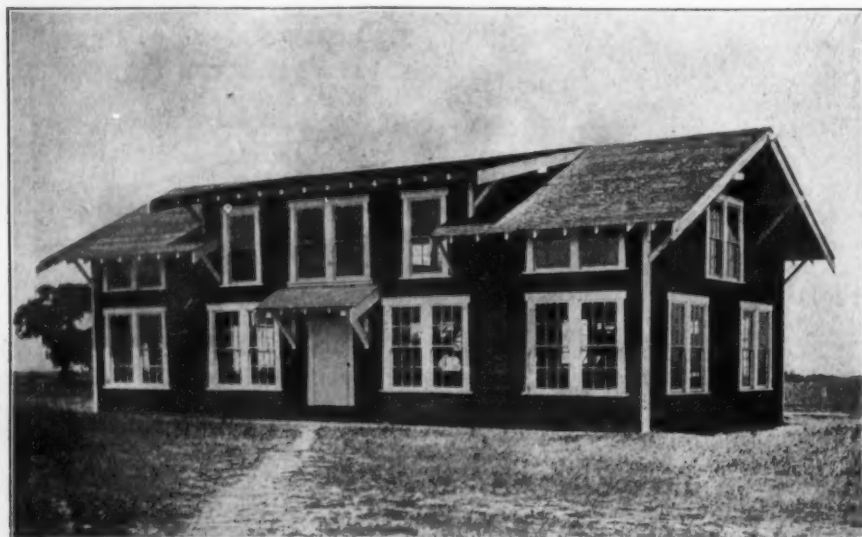
heavy machinery. The construction of the walls and upper floor and of the roof is particularly sturdy, so as to withstand heavy use and to resist heavy winds. Power in the building is furnished by two five-horsepower motors, so arranged that they may be connected with ten groups of machines singly, or together.

The building has been highly praised by shop teachers and others who have visited it, because of its economical and efficient arrangement. Every bit of the work is thoro and workmanlike.

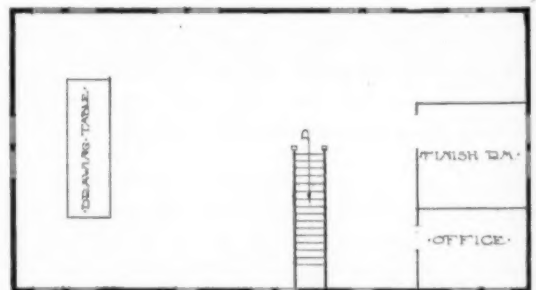
Install Private Elevator.

The Spokane, Wash., Board of Education has installed a small elevator in the Bancroft School for the use of a crippled pupil, Donald Burcham,

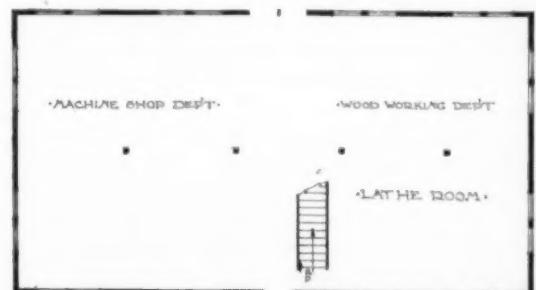
whose legs are virtually paralyzed as the result of infantile paralysis. The boy, who has been attending school with considerable difficulty, was recently practically debarred because the class to which he had been promoted in June was located on the second floor of the school building. The boy is unable to climb stairs and too heavy to be conveniently carried. His father took up the problem with the school board and offered to install a small elevator in the building at his own expense. The elevator is 30 by 36 inches in size and has a carrying power of 500 pounds. It is used only for the one boy, but is to be available to any crippled children who may be enrolled in the school.



MANUAL TRAINING SHOP, RIVerview UNION HIGH SCHOOL, ANTIOCH, CAL.
Mr. Geo. H. Cater, Director



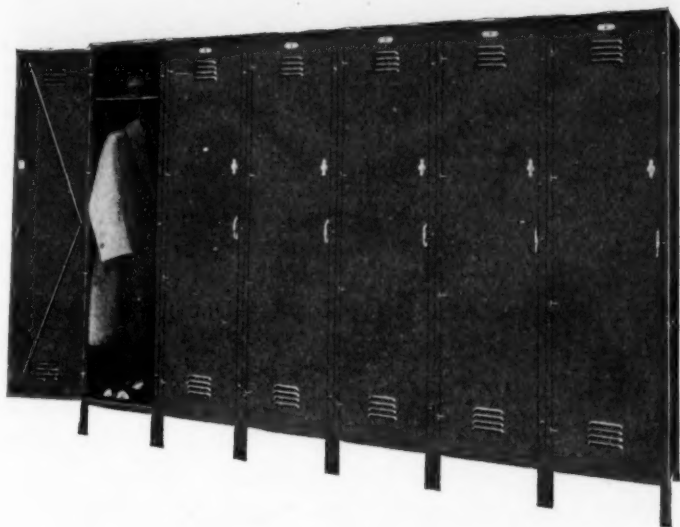
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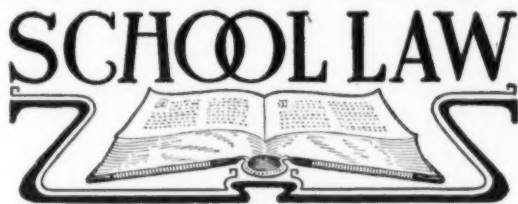
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School Lands and Funds.

The various officers thru whose hands under the statute, the tuition revenue of the state, arising from the common school fund, passes in its distribution and expenditure, are agents of the state.—School City of Terre Haute, of Vigo County, v. Harrison School Tp. of Vigo County, 112 N. E. 514, Ind.

After expenditure of the tuition revenue as erroneously distributed, under Burns's annotated statutes of 1914, § 6475, by a county auditor, a school corporation to which too much was distributed is not liable to one to which not enough was distributed.—School City of Terre Haute, of Vigo County, v. Harrison School Tp. of Vigo County, 112 N. E. 514, Ind.

Schools and School Districts.

Taxpayers, not having objected to order creating school district, cannot, after taxes have been assessed, have the order creating district declared void on ground that it was not formed for convenience of scholars; but the validity of the order can only be questioned by quo warranto against the trustees to accord with acts of the 34th legislature, c. 36, declaring them a corporation.—Minear v. McVea, 185 S. W. 1048, Tex. Civ. App.

As revised statutes of 1911, art. 2822, makes trustees of school district a body corporate, they are necessary parties to suit to declare organization of district void.—Minear v. McVea, 185 S. W. 1048, Tex. Civ. App.

School District Government.

The discretion of school officers, when reasonably exercised, will not be interfered with by the courts.—Beauchamp v. Snider, 185 S. W. 868, Ky.

The board of education of New York City is a branch of the state government, charged by the

state with the administration of its educational system in the City of New York.—Ackley v. Board of Education of City of New York, 159 N. Y. S. 249, N. Y. Sup.

The only salary to which a county school superintendent is entitled is that fixed by the fiscal court.—Beauchamp v. Snider, 185 S. W. 868, Ky.

Under the Kentucky statutes, § 4399, subsecs. 6, 7, the county board of education may pay the actual expenses of the county superintendent, necessarily incurred in discharging his duties, and other expenses necessary to an efficient system of schools.—Beauchamp v. Snider, 185 S. W. 868, Ky.

Under the Kentucky statutes, § 4399, subsecs. 6, 7, the county superintendent of schools should be allowed, by the board of education, only such necessary official expenses as are incurred in the county.—Beauchamp v. Snider, 185 S. W. 868, Ky.

Under the Kentucky statutes, § 4399, subsecs. 6, 7, the county board of education may not delegate to a county superintendent the authority to incur a bill for expenses.—Beauchamp v. Snider, 185 S. W. 868, Ky.

The county board may not allow expenses of a county superintendent in attending the sessions of an educational association, or payment for membership fees in such association for the trustees of the county.—Beauchamp v. Snider, 185 S. W. 868, Ky.

The county board may not allow the county superintendent the salary of an office assistant, when the board has not itself employed such assistant and agreed beforehand upon his compensation, notwithstanding the Kentucky statutes, § 4399, subsec. 5.—Beauchamp v. Snider, 185 S. W. 868, Ky.

The county board cannot allow county superintendent expense for a livery bill where the superintendent used her own horse and buggy, under the Kentucky statutes, §§ 4440a and 4416.—Beauchamp v. Snider, 185 S. W. 868, Ky.

Under the Kentucky statutes, §§ 4409, 4426a, subsecs. 9, 13, if the discretion of school officers is not reasonably exercised, either in the character of expenses or in the mode by which they are allowed, the courts will interfere upon proper application.—Beauchamp v. Snider, 185 S. W. 868, Ky.

School District Property.

Where it is charged that a school board built a building in a manner from which an injury resulted, it is presumed that the school board planned the building.—Daniels v. Board of Education of City of Grand Rapids, 158 N. W. 23, Mich.

The board of education of the city of Grand Rapids held not liable for injury to pupil resulting from faulty construction of a building and failure to correct the fault, altho it may have used the building or permitted it to be used for public gatherings with or without rent.—Daniels v. Board of Education of City of Grand Rapids, 158 N. W. 23, Mich.

Where a board of education is not liable for torts to pupils in its governmental capacity, its individual members are not liable.—Daniels v. Board of Education of City of Grand Rapids, 158 N. W. 23, Mich.

School District Taxation.

Under the Kentucky constitution, § 157, the act of school trustees in ordering improvements costing \$3,800 when revenue was \$2,800, after voters defeated proposition to issue bonds was illegal.—Flanders v. Board of Trustees of Little Rock Graded School, 186 S. W. 506, Ky.

The Wisconsin statutes of 1915, § 475, authorizing borrowing of money from state trust funds by any school district to aid in erection or purchase of schoolhouse, authorizes borrowing of \$12,000 to remodel a school building and erect an addition.—Cotter v. Joint School District No. 3 of Village of Plum City, 158 N. W. 80, Wis.

Omission of resolution of electors of school district authorizing it to apply for loan from state trust funds to remodel school building to state time and manner of payment, as required by the Wisconsin statutes of 1915, § 475, was supplied by the statutes of 1915, §§ 258a-1, 261, regulating payments.—Cotter v. Joint School District No. 3 of Village of Plum City, 158 N. W. 80, Wis.

Under the Kentucky statutes, § 4464, providing for taxes for school districts, county court is without power to direct what proportion thereof shall be used for maintenance and what for repairs and construction; that being a matter within the discretion of the trustees.—Flanders v.

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Board of Trustees of Little Rock Graded School, 186 S. W. 506, Ky.

Money raised by tax voted by electors of consolidated school district to provide for building of a schoolhouse cannot be used either to maintain school or transport pupils—Gibson v. Anderson, 186 S. W. 497, Ky.

Where trustees of school district contracted in one year for improvements, in excess of income provided for that year, and paid amounts due from their private funds, they could not from year to year recoup themselves from revenue.—Flanders v. Board of Trustees of Little Rock Graded School, 186 S. W. 506, Ky.

Where trustees of school district contracted in one year for improvements in excess of income provided for that year, and paid amounts

due from their private funds, they could recoup themselves to extent of balance of revenue for that year over other necessary expenditures.—Flanders v. Board of Trustees of Little Rock Graded School, 186 S. W. 506, Ky.

Teachers.

The Kentucky statutes, §4501, vest in the county board of examiners discretion in determining the moral fitness of applicants for teachers' certificates and granting or withholding certificates on such determination.—Crawford v. Lewis, 186 S. W. 492, Ky.

Denial by county board of school examiners of teacher's certificate on account of moral unfitness under the Kentucky statutes, §4501, held not an abuse of board's discretion.—Crawford v. Lewis, 186 S. W. 492, Ky.

Some Results of the Minneapolis Survey

About a year ago a vocational survey of the city of Minneapolis, Minn., was made to determine just what kinds of vocational education were needed to meet the needs of the community. The survey which was made with the aid of the National Society for the Promotion of Industrial Education, gathered facts about the schools and vocations of Minneapolis, which were regarded as necessary for an intelligent planning of a program of vocational education. The findings and conclusions were made the basis of discussion at the annual convention of the society in Minneapolis, in January, 1916. The following statement of the results of the survey will give the readers of the Journal an idea of just how valuable the survey has been in arousing interest and securing participation in vocational opportunities.

First. Thru the interest and hearty support of the employers and employees of the city, the total registration of evening school students has been increased 1,233 for the year, this increase being made up of people employed in the trades, industries and occupations. Evening school courses were opened giving trade extension training in architectural drawing, automobile construction, bakers' chemistry, bricklaying, build-

ing foremen, cabinetmaking, carpentry, cost estimating, electrical work, engineering, firing and janitor work, industrial design, painting, plastering, plumbing, printing, composition, presswork, sheetmetal drafting, steamfitting, stone cutting, telephony and welding.

Second. A dull season class for bricklayers was held during January and February, with an attendance of sixteen apprentices. These apprentices attended school all day and received half their usual wage.

Third. The attendance of the Girls' Vocational High School was increased from 90 to 498, or eighteen per cent. New courses in junior nursing and machine operation were introduced, part-time classes in salesmanship were established and evening trade extension classes for women employed in the trades were opened.

Fourth. The day school of Dunwoody Institute had a leap in registration from eighty to three hundred, or an increase of 27 per cent. A course in telephony has been opened with an enrollment of fifteen boys.

Fifth. A four-year technical course has been established with an initial enrollment of 106 boys. The course aims to prepare boys for the industries, either on the business or directive side and

graduates are employed at initial salaries of not less than \$50 per month.

Sixth. A two-year course in commercial education will be offered in the five high schools during the coming year. The course supplants the work offered in the five local business colleges and offers free instruction in commercial work to all young people. The regular four-year course of the high school has been revised by a special committee, making it practical and thoro in the preparation of commercial students.

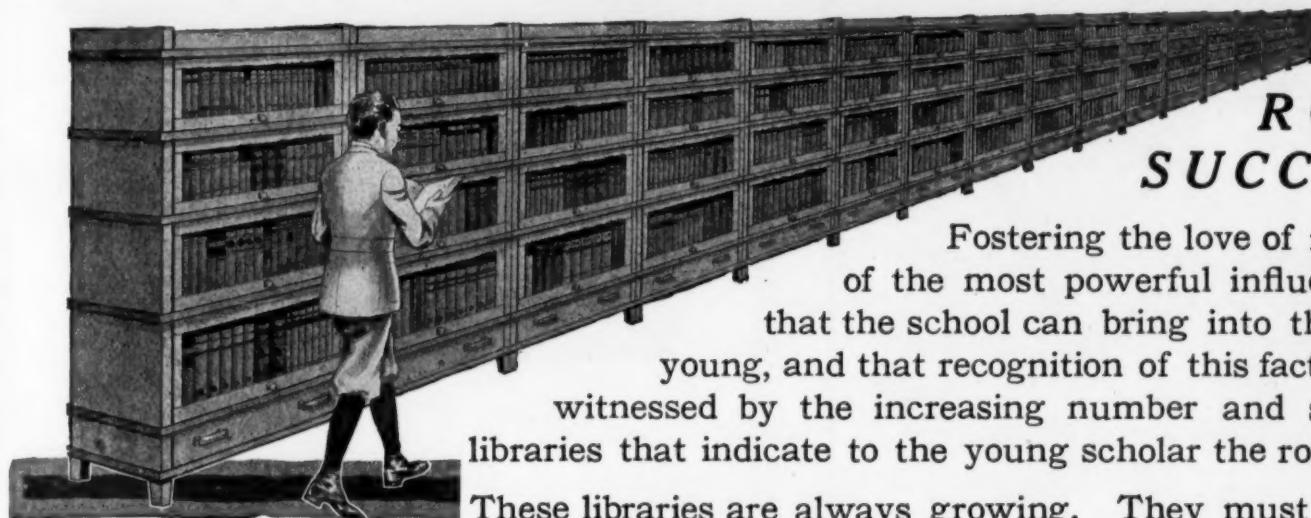
Seventh. Advisory committees of employers and employees have been formed to assist the schools in making the work in automobile construction, bricklaying, carpentry, printing and telephony, commercial education, salesmanship, technical education, dressmaking and millinery, machine operating, household arts and junior nursing more successful.

Eighth. Trade understandings between the schools and the trades and industries have been worked out with the approval of the employers and employees in the automobile, carpentry, bricklaying, electrical, machinist, painting, plastering, printing, plumbing and steam fitting trades.

Ninth. The trade understandings make the two-year course in the industrial school equivalent to two years of apprenticeship in the trade. Employers agree to consult the schools when looking for new help and to employ new workers at a third-year apprentice wage. Diplomas are withheld until after one year of actual work in the trade or industry and until proof of satisfactory service is obtained from the employer. The arrangements cover such lines as automobile construction, printing, composition and presswork, carpentry, cabinetmaking, electrical work and telephony, commercial training, salesmanship, dressmaking, millinery, machine operating and junior nursing.

Tenth. Evening school instruction in telephony has been established with more than two hundred men enrolled.

Eleventh. Correspondence school instruction is carried on for telephone men in the state. No man is eligible for the course who has not finished the eighth grade and who has not at some time been employed in the telephone service.



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Fostering the love of reading is one of the most powerful influences for good that the school can bring into the lives of the young, and that recognition of this fact is growing is witnessed by the increasing number and size of school libraries that indicate to the young scholar the road to success.

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Twelfth. A uniform system of apprenticeship for use in the employment of Dunwoody apprentices in the different trades has been worked out and is being adopted by a number of the trades. At present, it has been adopted by the automobile, machinist, printing, carpentry, cabinetmaking, electrical and telephone trades.

Thirteenth. The Vocational Guidance Department of the schools has used the findings of the survey as a basis for its work in furnishing information on occupations to teachers and pupils. The separate chapters have been printed in pamphlet form and the studies made by the survey have been extended to other fields and other phases of employment in the trades and industries studied.

Fourteenth. In the spring of 1916 a class of seven hundred received certificates showing that they had completed one or more short unit courses in Dunwoody Institute. These courses had been worked out and advanced by the trades and had received their approval.

Fifteenth. The results of the survey have committed the city to a growing and determined program of vocational education from which it will never turn back. Close and intelligent working relations have been brought about between the board of education, the state university, Dunwoody Institute, the Y. M. C. A. and the Minneapolis Art School. Thru the respective conference committees plans for co-operating and for the parceling out of the work among the different organizations have been made.

Sixteenth. Junior high schools have been established to meet the needs of the city, and prevocational work in industrial and mechanic arts is being carried on thru the assistance of the Dunwoody fund and the resources of the public schools.

Seventeenth. Additional courses in baking, foundry work, sheetmetal work have been established in Dunwoody Institute, making a total of eleven trades taught in day classes of the school. When the school occupies its new location in February, 1917, it is expected that the registration will have reached at least six hundred in the day school, or an enrollment four times as great as that of the school at the start two years ago.

The city itself has benefited in a number of different ways thru the work of the survey experts. Six thousand copies of the report were published at the beginning and twenty thousand reprints were made by the Bureau of Labor Statistics at Washington, making a total of 26,000 copies circulated thruout the country, dealing with the industrial and business enterprises of the city and the method of dealing with the problem of vocational education. The community problem has been touched so that a better understanding and better feeling exists with regard to the training of workers and their relation to the civic and industrial life.

CLOSING THE SCHOOLS.

Thru the prevalence of infantile paralysis in New York City and the North Atlantic States, the problem of closing schools during epidemics has given school boards considerable concern. Some timely advice on the treatment of epidemics is given by Dr. W. A. Evans in the Chicago Tribune:

"As to the advisability of closing the schools in the presence of an epidemic of an ordinary infectious disease, all well informed health authorities are agreed. If it is an epidemic of smallpox the schools must be kept open. The morning roll call is an excellent machine for keeping track of sickness, including smallpox, in children. The gossip of the schoolroom and playground furnishes clues to hidden cases. The pupils are best vaccinated at school. When vaccinated they are immune to smallpox.

"It is just as well established that in the presence of epidemics of scarlet fever and diphtheria it is advisable to keep the schools open. As to the proper procedure in the presence of measles there is some disagreement among authorities. Some hold that the closing of the schools at the beginning of an epidemic is helpful. All agree that after an epidemic of measles has been well established closing the schools does harm rather than good.

"When it comes to infantile paralysis there are circumstances under which the opposite policy is wise. The authorities in New York have decided not to open the schools until later in the season. This is good judgment for the following reasons: We know very little about the way in which in-

fantile paralysis is spread. It will be noted that the precautions advised include keeping away from cases, contacts, carriers, and people generally [on the theory of spreading by contact], screening against flies [theory of insect carriers], sprinkling the streets and grounds [theory of air borne infection], not to mention several other unrelated precautions.

"The reason they make these shotgun recommendations is because they do not know definitely what spreads the disease, nor even approximately what to do to prevent spreading. Under these circumstances, in the face of an epidemic of infantile paralysis, all avoidable assemblages of people, and especially children, should be avoided. The schools should not be opened until the epidemic is very definitely approaching its end.

"The drawback to giving this advice is that many communities to which it does not apply will apply it to themselves. Tho it is good advice for New York, it is poor advice for Chicago. The Chicago schools should be opened on time.

"While it seems to be a very contagious disease in that the noses of contacts become infected with the virus, it is a well known fact that very few of those in contact with infantile paralysis contract infantile paralysis. From the standpoint of infection it is not very contagious; from the standpoint of infestation of the nose, it is. Because it affects principally children under school age and because it is not highly contagious it is wise to open the schools in a city where but few cases of infantile paralysis exist."

EVENING SCHOOLS.

A training class for the teaching of English to adults has been formed at the Chicago Normal College. There will also be an institute for those to be employed as evening school teachers during the winter.

The Chicago school board has provided for day classes for adults who work nights in three different sections of the city. At present one school is in operation at the Jones School.

Worcester, Mass. The owners of manufacturing plants have been asked to co-operate with the schools in urging employees to enroll in evening schools. It is planned to enroll all men over 21 years who cannot read and write.

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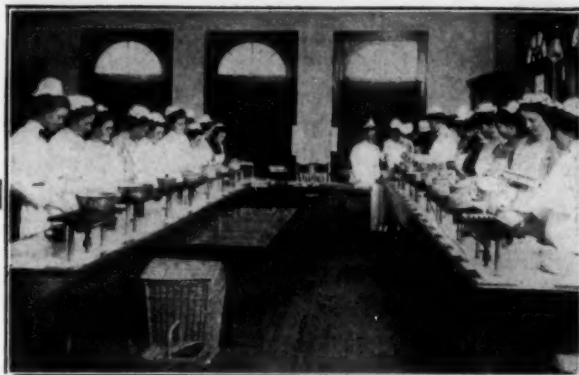
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Established 1868

AN INSPECTION CARD.

Supt. Cyrus S. Grove of Stephenson County, Illinois, uses the following form in recording the physical condition of the schools under his supervision. The form permits of a ready study of the main features of a school plant, and makes possible comparisons from visit to visit and from year to year. By mailing a copy of the form to the school board shortcomings as well as excellences can be brought to the attention of the members in a forceful manner.

Schoolhouse.

1. Exterior condition
2. Interior condition
3. Well lighted
4. Well heated
5. Properly ventilated
6. Location and width of aisles
7. Good blackboards
1. Adequate
2. Suitably placed
8. Accommodation for wraps
9. Provisions for lunch pails
10. Room tastefully decorated
11. Window shades
12. Clean ceiling, walls and floor

Equipment.

1. Number of desks
1. Number 6 desks
2. Number 5 desks
3. Number 4 desks
4. Number 3 desks
5. Number 2 desks
2. Good teacher's desk
3. Three good chairs
4. Good clock
5. Reliable thermometer
6. Good globe
7. Set of maps
8. Desk copies of adopted texts
9. Supplementary readers
1. Number for first grade
2. Number for second grade
3. Number for third grade
4. Number for fourth grade
5. Number for fifth grade
6. Number for sixth grade

7. Number for seventh grade
8. Number for eighth grade
9. Miscellaneous
10. Good library
1. Number of books for first grade
2. Number of books for second grade
3. Number of books for third grade
4. Number of books for fourth grade
5. Number of books for fifth grade
6. Number of books for sixth grade
7. Number of books for seventh grade
8. Number of books for eighth grade
9. Miscellaneous
11. Pupils' reading circle books for current school year
12. Reference books
1. Webster's New International Dictionary
2. Webster's Academic Dictionaries
3. Webster's Elementary School Dictionaries
4. Cyclopaedia
5. Miscellaneous
13. Good case for books
14. Reading table
15. General information material
1. School journals
2. Magazines
3. Current event publications
4. Local papers
5. Agricultural papers
16. Number of good wall pictures
17. Suitable flag
18. Pencil sharpener
19. Seat work material for beginners
20. Organ or piano
1. Good song books
21. Paper
1. Examination
2. Drawing
22. Ink, pens, and penholders
23. Registers
1. Daily
2. Classification
24. Waste paper basket
25. Mirror
26. Wash basin

27. Paper towels
28. Brush and combs
29. Sweeping compounds
30. Other necessary supplies
31. Good janitor
32. Telephone
33. Good diary
34. Miscellaneous

School Premises.

1. Size
1. Rods long
2. Rods wide
3. Number of acres
2. Drainage
3. Leveled
4. Clear from rubbish
5. Number of shade trees
6. Apparatus for play
7. Condition of fences
8. Hitching post accommodations
9. Condition of roads bordering on premises

Outbuildings.

1. Built according to State Plan
2. Sanitary
3. Good repair
4. Widely and properly separated
5. Properly screened
6. Inspected daily
7. Kept clean

Fuel House.

1. Conveniently located
2. Ample
3. In good condition
4. Kept in order

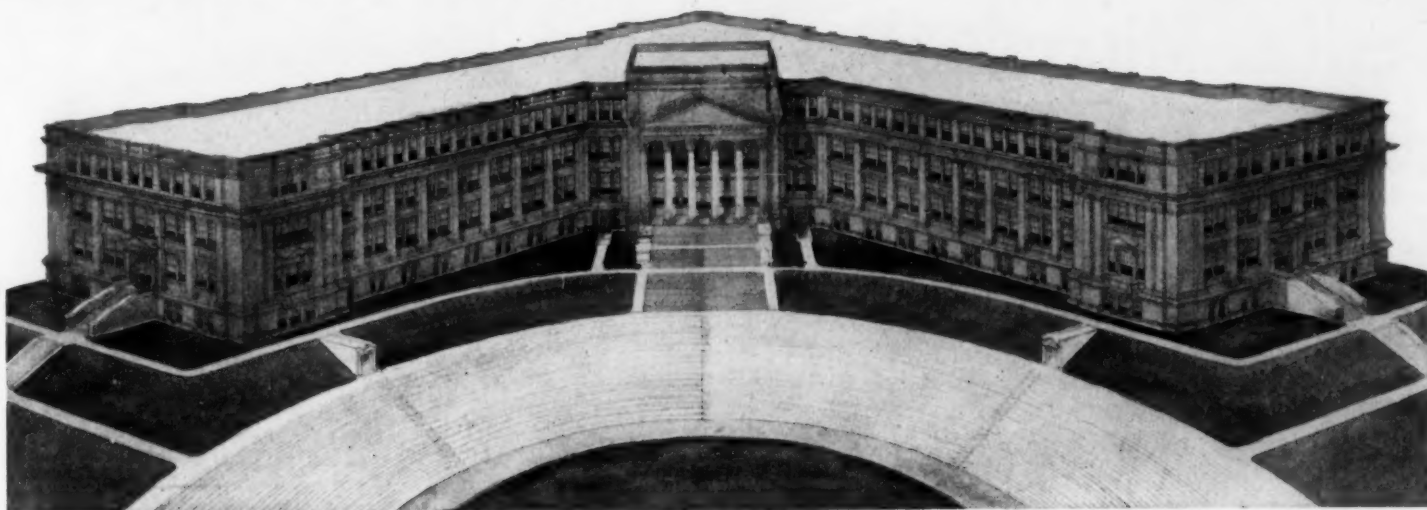
Water Supply.

1. Well
1. Properly located
2. Covered with concrete platform
3. Concrete gutter to carry away waste water
4. Proper drainage
5. Pump in good repair
6. Water pure

Value.

1. Of site and buildings
2. Of equipment

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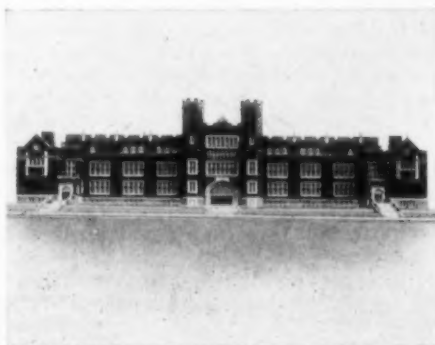
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Geo. W. Knight, Engr., Newark



NO. 2 SCHOOL, Bayonne, N. J.
Guilbert & Betelle, Archts., Newark
Geo. W. Knight, Engr., Newark



NO. 11 SCHOOL, Bayonne, N. J.
R. C. Hutchinson, Archt., New York



GROVER CLEVELAND HIGH SCHOOL, St. Louis
Wm. B. Ittner, Architect, St. Louis

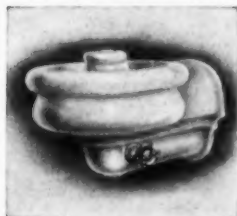
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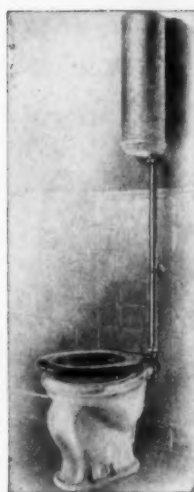
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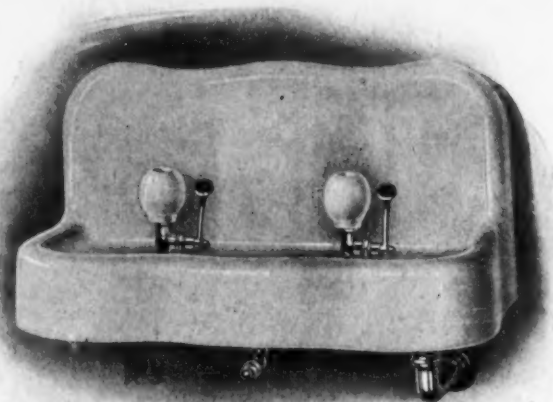
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Among Boards of Education

WHAT IS A BUDGET AND WHY DO WE NEED IT?

A properly prepared budget is a program of public service which lists the expenditures of public funds necessary to carry out that program. It is proposed by administrative officials for sanction by legislative authority. It breaks up the multifold activities of the city school system into their integral parts, so that each one can be thought about and planned about as a separate entity.

A properly prepared budget indicates before, and controls afterwards, the amount to be spent on city school system service of all kinds. It formulates a definite plan in advance of expenditure. It gives specific classified information without which it is impossible to determine the exact needs of city school system activities.

A properly prepared budget does not guess. It discloses duplications and brings to the attention of the appropriation body specific comparative detail of all activities.

A properly prepared budget will furnish incontrovertible facts for settling policies of retrenchment that involve consolidations, abolishments and other curtailments.

A properly prepared budget invokes the limelight of public opinion and is a powerful deterrent of evil legislation. It interests the public in city school system projects because of its understandability. It brings to the members of the finance committees clarifying reasons why departmental requests for money are recommended for allowance, reduction, or disallowance.—Dr. William H. Allen.

Teachers' Salaries in Ohio.

An indictment of a mistaken policy of state government is made by State Auditor Donahy of

Ohio in his annual report made public on September 11.

With blunt directness Mr. Donahy writes:

"How about the 30,000 teachers in the elementary and high schools of Ohio that teach the 930,783 pupils enrolled in our schools? Of the \$46,000,000 contributed in various ways by Ohio's citizens for the support of the schools, these teachers get only \$17,000,000, or an average of about \$54 per month. But before they are permitted to teach and receive this munificent compensation they are expected to attend college and receive normal training, and are required to pass a teacher's examination that would everlastingly "paralyze" the average public official. But think of the reward—\$54 per month—why, the janitors who sweep the floors and dust the furniture in the empty halls of the general assembly are today drawing \$60 per month each, and the legislature is not in session."

The report contrasts the qualifications required of teachers with the fitness required of public officials.

"It costs the taxpayers of Ohio \$1,000,000 annually to determine whether Republicans or Democrats shall have the jobs. Elective officials and members of the general assembly are not required to have a high school education and do not have to pass a civil service or any other kind of preliminary examination. Yet two months after election they are inducted into office and the members of the legislature in 90 days acquire a complete knowledge of the science of government, pass 1,000 pages of laws and appropriate \$40,000,000 of the people's money and go home, having earned in these few months \$2,000 each."

The greatest menace to Ohio schools, the growth of which Auditor Donahy describes as one of the brightest pages in Ohio history, is the

rapid increase of the school debt. In 1915, the school debts of Ohio, according to the report, amounted to \$48,707,647.19, a gain of \$11,984,737 in one year. Of this indebtedness, \$47,977,756.12 went for the building of "ornate school buildings in cities and villages." The greatest enemy of the schools, says the report, is the board of education that issues bonds to build a \$250,000 building when one costing \$100,000 will meet requirements. At the present rate of increase of school debts it is estimated that within ten years it will require 50 cents out of every dollar of direct tax collected to liquidate the school debt.

AMONG BOARDS OF EDUCATION.

Sioux City, Ia. A change is to be made in the paying system for employees of the public schools. It is planned to issue one warrant to the bank and to permit the employees to draw their salaries from the bank by means of cashier's checks or drafts. The new system would eliminate a great deal of bookwork for the business department.

Mr. Charles Gate Fielding, president of the board of education at South Orange, N. J., died August 18th at his home in Ocean Grove, N. J. Mr. Fielding had been president of the board for the past twelve years, during which time all the new school buildings were erected. One of the buildings has been named after him.

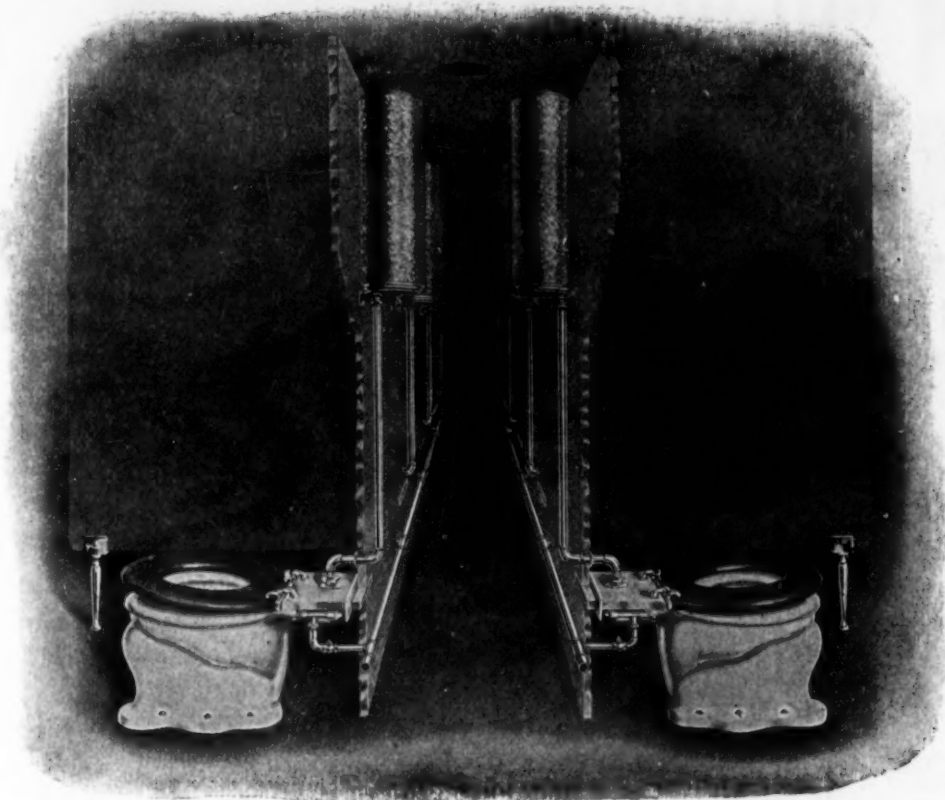
Dover, Me. The board has introduced the semi-annual promotion system in the schools. The purpose of the new system is to advance the bright pupils and to help those who are deficient in certain studies.

Moline, Ill. Upon the recommendation of Supt. L. A. Mahoney, the board has reduced the number of principals to be employed in grade buildings. It is planned to gradually reduce the present number until two or more buildings are under one principal. It is the purpose of the board to secure competent and close supervision, at the same time employing fewer principals at higher salaries.

Detroit, Mich. Beginning with the fall term, all pupils in grade schools who are below normal attainment for their age, will be given special attention. It is planned to secure the co-operation of the teachers and principals in locating



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says a prominent school secretary, "and will gladly recommend it. We have been using the Nelson System in our schools for the past year and this is the first time in the history of the city schools that the closets have been entirely free from bad odors.

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backward or subnormal pupils, to find the cause of backwardness and to provide work suitable to the needs of the individual children.

Greenville, S. C. The board has created the position of kindergarten superintendent, in which is to be centered the supervision of the first three grades of all the grade schools. The new system aims to harmonize the courses in the respective schools so that pupils in these grades may be uniformly instructed. Changes from school to school may be made in the future without disorder and without conforming to new methods.

Lancaster, O. The board has discontinued an old rule providing that not more than one person from a family could be elected to a teaching position.

Albert Lea, Minn. A night school for foreigners is planned for the early fall. The school has been established thru the co-operation of the state naturalization bureau and local businessmen's association and the school board, and is free to foreigners of the city.

Minneapolis, Minn. A new system of school insurance has been adopted by the board upon the recommendation of Mr. G. F. Womrath, the business superintendent. The policies will be divided in amounts not exceeding \$100,000 for any single company and the size of each policy will be governed by the amount of taxes the company pays. Any agency which pays less than \$100 a year taxes will be allowed only \$10,000 insurance and others will be given amounts on a graduated scale up to \$100,000. The plan will become operative with the placing of recently expired insurance amounting to \$73,500.

Berkeley, Cal. The board has ordered that the feather duster be abolished. A "dustless" cloth will be used in the future.

Fitchburg, Mass. An evening technical school will be opened beginning October first.

Detroit, Mich. The board plans to reopen the night schools with increased accommodations and an increased appropriation. A total of 26 schools in all sections of the city have been designated for night school classes.

New Bedford, Mass. The board has lengthened the school year by two weeks, one additional

week to be added at the opening of schools and one at the close. The purpose of the change is to reduce the length of the elementary school course to eight years.

Mr. Frank B. Perkins, secretary of the board at Elgin, Ill., for the past 20 years, has resigned.

Minneapolis, Minn. Upon the suggestion of the principal of Central High School, the board has ordered that the towel service of the schools be taken care of by the high school laundry. A special launderer is to be hired at a salary of \$700 a year. The change will make possible a considerable saving in the laundry bill which reached \$3,651 during the past year.

Kenosha, Wis. Beginning with September, the schools were reorganized on the six-and-six plan, with one Senior High School and two Junior High Schools. The two latter accommo-

date all the pupils of the seventh and eighth grades of the city.

A special school for backward pupils has been opened by the board at Kenosha, Wis. A special instructor has been employed.

The School Board Section of the Nebraska State Teachers' Association will hold its annual meeting November 9, at Omaha. An attendance of fully 200 is expected. Information concerning the meeting may be had from Mr. L. H. Thornburgh, secretary of the association, Alexandria, Neb.

Jacksonville, Ill. The board has installed a business system which is to be centered in the superintendent's office. It is provided that all requisitions shall be O. K'd in the office of the superintendent before they are sent out. The bookkeeping system has been so arranged that a constant check is possible on all orders and discrepancies can be traced to the person involved.

St. Louis, Mo. A change in the method of selecting members of the board of education is being advocated by the local civic league. The plan which the league is supporting, proposes to place appointive power in the mayor's hands and to place on his shoulders the responsibility for the proper men who are to make up the membership. Should the mayor fail in his official duty, it is provided that the voters of the city may remove him. Each appointee to the board is subject to removal at the discretion of the mayor.

The new plan is especially desirable, according to the league, because it makes some one person responsible for unwise or improper appointments, and because it removes the school system from political control. The league's proposal is rather startling in view of the reputation which the St. Louis board has enjoyed because of its efficiency and the high standing of its membership.

The school board of Lincoln, Ill., has abolished semi-annual enrollments of new students and the formation of new classes during the second term. The change was made necessary because of conflicts occurring in the high school. Students protested against the practice because of the fact that they were obliged to wait until June for diplomas of graduation.

Greenville, O. The board has adopted a reso-

(Concluded on Page 67)



MR. J. M. MALMIN,
President Minnesota Associated School Boards,
Blue Earth, Minn.

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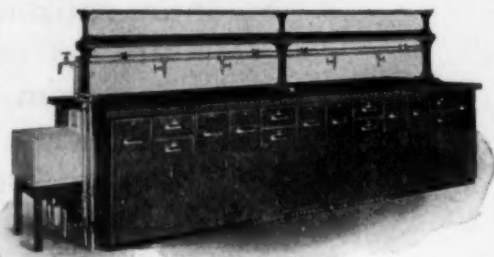
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For Busy Superintendents.

Goodman, Wis. The board has reorganized the schools on the six-and-six plan. The seventh and eighth grades and the first-year class of the high school have been combined and a system of departmental teaching inaugurated. A supervised study period has been introduced for the benefit of the seventh and eighth grades.

Waukesha, Wis. Departmental teaching has been adopted for the upper grades of the elementary schools. Each subject is taught by a special teacher and all classes are conducted in special recitation rooms.

Detroit, Mich. Supt. Charles Chadsey has recommended a trial of the Gary plan of organization in the local schools.

According to the plan proposed, annexes are to be constructed on the playgrounds, each of the structures to cost about \$40,000. The system is to be installed in twenty or 25 buildings in the more congested districts. The change, in the opinion of Dr. Chadsey, would not relieve the situation indefinitely because of the growth of the city, but it would care for immediate needs and would preclude the necessity of half-day sessions.

Five uniform courses for the public schools of Massachusetts have been issued by the State Board of Education for use in the first six grades. The preliminary drafts of the subjects for the uniform course were presented at the Conference of School Superintendents held at Harvard University in July, 1915. The completed courses include English expression, penmanship, music, English literature and self-care. The remaining subjects of arithmetic, history, nature study, geography, drawing and handwork will be ready for distribution in January, 1916.

The subjects have been arranged on the junior high school plan and the outlines are given in

pamphlets stating the work by grades, with general and specific rules for pursuing the subject matter. The courses aim to assist the teacher in the one-room country school as well as the teacher in the more populated locality.

The Kansas Bureau of Educational Measurements and Standards, which has its office in the Kansas State Normal School at Emporia, has just issued a price list of the standard tests and measuring scales published under its supervision. The bureau offers blanks for elementary arithmetic, reading, writing, spelling, composition and drawing and for high-school algebra, reading and composition. The bureau has in press a Teachers' Handbook of Educational Measurements, interpreting tests and scores and offering suggestions for remedial instruction.

Foxcroft, Me. Under the direction of Supt. Frank R. Morris, a system of semi-annual promotions with advancement by subject, has been put into operation. In effect, the new system makes it possible for bright pupils to complete the work of the elementary grades in eight instead of nine years.

In brief, the plan provides for promotion by subject, replacing the traditional promotions by grades. Pupils may be admitted twice a year, in September and February. No pupil may be admitted to the primary grade who has not reached the age of five years.

Two classes will be graduated each year, the first one to complete the grammar grade in February and the second in the following June. Pupils who do not intend to enter the high school may go to work after completing the grammar grade. Those who expect to continue their education may be immediately enrolled in the freshman class of the high school. The fact that no diplomas are given until June, is an inducement for pupils to take a half year of high school before withdrawal.

In connection with the plan, a complete revision of the method of marking pupils has been adopted. Teachers will mark pupils entirely on the kind of work they do in comparison with what they are able to do. Pupils who do good work and who show that they are able to com-

plete the work of the year will be marked "satisfactory." Those who do not come up to what they are capable of doing, will be marked "able to do better work" and a conference of teacher, parent and pupil will be called. A study of the cause of the failure will be made and the pupil placed where he can do the best work.

The system gives opportunity to both bright and backward pupils to advance as rapidly as they are able. Backward pupils need only repeat the subjects in which they have failed, while the advanced students are enabled to complete their education earlier and to enter an occupation.

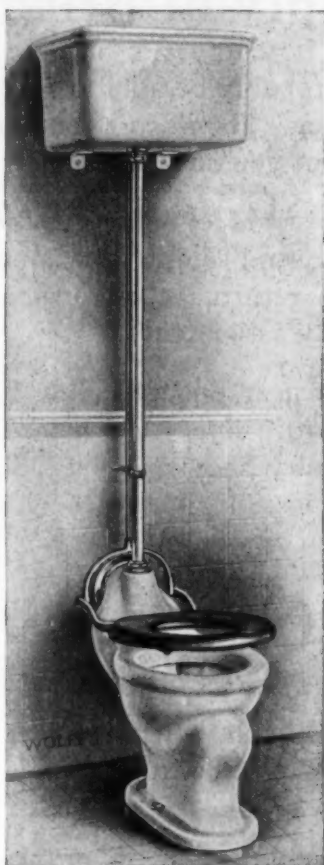
A survey of the alumni of the Marshalltown High School, Marshalltown, Ia., just completed by Supt. Aaron Palmer, shows that many young people of the city are enrolled in colleges and universities this year. A total of 162 will be, or have been enrolled in colleges, universities, business schools or postgraduate work in the high school.

Of the students listed, 34 will be in the Iowa State College at Ames, Ia. The State University will draw 22, while Grinnell College, Cornell College, Coe College and others will attract a number of students.

The survey also shows that a number of college students are paying all or a large part of their expenses and that the colleges are very liberal in granting scholarships to those who are working their way.

A students' Handbook of the Junior-Senior High School, Mankato, Minn., has just been issued for the school year 1916-17. The booklet which contains the courses of study offered in the Junior-Senior School and the rules and regulations governing the conduct of the students, is published and distributed for the use of the students and their parents.

The booklet takes up the admission of students, graduation, school organization, attendance and tardiness, rules of conduct, courses of study, miscellaneous courses, social organizations, general school activities, gymnasium rules and limitation of students' activities. It has been prepared and issued under the direction of the Principal, Mr. W. G. Bate.



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POLITICS AND BUFFALO SCHOOLS.

By Glen Edwards.

Under Buffalo's commission charter the city council was given authority to enact ordinances governing to a large degree the administration of the school system. Accordingly, in April, 1916, the council approved ordinances prepared by the chairman of the board of education, giving what in Buffalo would be termed large powers to the board of education.

Neither city charter nor ordinances defined clearly the powers and jurisdiction of the city commissioner assigned to the department of public affairs, which includes the department of public instruction. As a result, shortly after the enactment of the ordinances in April, friction arose between this commissioner and the board of education.

The board of education had by ordinance been given full authority to appoint its own employees. Acting on this authority it appointed as secretary the candidate judged by a majority of the board to be best qualified for the position.

This precipitated a crisis and the dispute was abruptly terminated on July 5th by the enactment, as an emergency measure, of ordinances superseding those passed in April. The new ordinances gave to the commissioner assigned to the department of public affairs complete control of the business affairs of the school system.

Thus, Buffalo's first board of education, secured after long agitation, was shorn of most of the power secured to it under the April ordinances.

Under the ordinances now in effect the board may

Prescribe qualifications of teachers and conduct examinations.

Prescribe duties of teachers, and of the superintendent within charter and ordinance limits.

Regulate the conduct and discipline of pupils and prescribe the terms of admission, promotion, etc.

Classify schools and establish special schools if expense does not exceed appropriation.

Prescribe courses of study and textbooks.

Determine the school years, terms, sessions, etc.

Permit the use of school buildings and grounds for other than school purposes.

All other powers are exercised by the commissioner alone or by him with the approval of the board, or by the board of education with the concurrence of the commissioner. The board, by itself, can neither purchase a pencil nor a sheet of paper, nor appoint its own secretary. Neither can it appoint its own employees other than teachers, fix their salaries, determine their duties nor discharge them.

The commission charter created a school system peculiarly complicated. The ordinances now in force still further complicate the situation. The board is without power. School affairs are inextricably interwoven with the affairs of the various municipal departments. Moreover, these ordinances may be amended or rescinded at any time by a four-fifths' vote of the council.

There could be no clearer argument in favor of the complete separation of schools from general municipal affairs than the situation which has

developed in Buffalo under the so-called home rule educational provisions of the charter.

Mr. Gass' Death.

Howard A. Gass, state superintendent for Missouri, died on September 18th, following a brief illness. Mr. Gass was born in Audrain County, Missouri, in 1852 and began his career as an educator by teaching a country school in his native county. In 1885 he was elected school commissioner and in 1887 founded the Missouri School Journal, which he continued to publish until his death. In 1887 he was made chief clerk in the office of the Missouri State School Department, which office he held for a period of more than thirteen years. In 1907 he was elected state superintendent and in 1915 he was re-elected for a second term of four years.

Mr. Coates Elected.

The Kentucky State Board of Normal Regents has filled the vacancy in the presidency of the Eastern State Normal School by electing Mr. T. J. Coates, who has been for several years state supervisor of rural schools for Kentucky. Mr. Coates, altho not an applicant for the position, was chosen after the claims of nearly thirty candidates had been considered.

Mr. Coates is a Kentuckian by birth. He received his bachelor's degree and his earlier professional training in the Southern Normal School at Bowling Green, Ky. Subsequently he studied in the graduate department of the School of Education, of the University of Chicago.

For several years Mr. Coates taught in Kentucky high schools. He was principal of the High School at Richmond and during the past five years has been supervisor of rural schools for the state school department.

Mrs. Katherine M. Cook, formerly state superintendent of public instruction in Colorado and now connected with the Bureau of Education at Washington, has been appointed to conduct a survey of the educational institutions of Colorado. Mrs. Cook will be associated with Mr. A. C. Monahan, federal specialist for the department of rural schools. Mrs. Mary C. Bradford, State Superintendent of Public Instruction, is co-operating with the Bureau's experts in the conduct of the survey.



MR. T. J. COATES,

President-elect Eastern Kentucky State Normal School, Richmond, Ky.

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STANDARDIZATION OF SCHOOLHOUSE DESIGN AND CONSTRUCTION.

Work of the Committee of the National Education Association Outlined.

The Committee on Standardization of Schoolhouse Design and Construction appointed by the Department of School Administration of the National Education Association has begun work by making public a statement of the reasons for its own existence and for the study which it is to undertake. The statement reads as follows:

In the United States over one hundred millions of dollars are spent each year for new school buildings, the plans of which have been chiefly selected on the basis of the personal preference of architects, educators and members of school boards, rather than from fitness and economy of arrangement ascertained by the application of tests.

Up to the present time no data have been collected for establishing national standards by which to judge the skill that has been exercised in working up the plan or to check the plan as to economy of erection.

This has caused great variation in the plans of school buildings of the same type and number of rooms and probably leads to a great waste of public money.

A study of published plans show many of these variations to be of primary importance in schoolhouse design; and results obtained by investigations into the cost of school buildings (such as the investigations by the Cleveland Board of Survey) show an apparent waste of public money.

Any comparison of a number of school buildings of the same type, the same number of rooms, and the same general construction, exposed unwarranted difference in their cost.

The situation therefore demands an investigation to determine whether the money appropriated is being spent to best advantage and how to eliminate waste.

The investigation should also furnish data by means of which officials and committees could judge the economy and suitability of plans for school buildings when submitted to them.

The Department of School Administration of the National Education Association considered this situation at the New York Convention (July, 1916) and appointed a committee to investigate the subject of school architecture. The Committee included Frank Irving Cooper, Architect, Boston, Chairman, Mr. S. A. Challman, Commissioner of School Buildings of Minnesota, Mr. C. E. Chadsey, Superintendent of Schools, Detroit, Dr. Louis M. Terman, Professor of Hygiene, Stanford University, and Dr. Leonard P. Ayres, Director, Department of Education, Russell Sage Foundation.

The immediate business of the committee will be an endeavor to determine a definite basis for its work and may be separated into three divisions.

First: To select from those standards the details in construction pertaining to school architecture, which have been already determined upon by the various states and which are in general use by various trade organizations.

Second: To select from standard details those usually accepted by educational authorities.

Third: To fix standards of school planning. The first and second parts of this work call for correspondence with authorities on existing standards and it is hoped that school boards and school officials will furnish the committee with such information as may be called for from time to time,

and also furnish opportunities for investigation by the committee or its representatives.

The third part means original research analyzing the architectural plans of floor arrangements of school buildings, to determine relative areas set apart for different uses and to form such scientific standards as may be applied, by persons unskilled in the intricacies of the architectural profession in order to enable them to test plans submitted to them.

Plans and cost sheets of buildings already erected will afford a basis for study which will be very much appreciated.

General findings only will become public property for the use of all who have to do with the school buildings of the United States.

The Cost of Education in Illinois.

Public education in Illinois will receive this year about one-third of the entire appropriations voted by the 49th general assembly of the state. Of this amount a little more than one-half is to go into the common school fund and one-third to the University of Illinois. The total which reaches about \$15,000,000, places Illinois second in rank among the states, the first being Pennsylvania. Altho ranking third in population, Illinois in its finances is ahead of New York by more than \$5,000,000 and spends \$4,000,000 more than Wisconsin.

That the state of Illinois believes in education is evident from the fact that 32 per cent of the appropriations of the last legislature were for educational purposes, 26 per cent for charitable purposes and 12 per cent for executive purposes. Previous to the meeting of the general assembly an appropriation of \$15,259,734 was asked and the amount actually appropriated was only \$200,000 less than what was requested.

One-tenth of the amount for education is expended on the normal schools, where the great body of teachers is trained for service in the common and secondary schools of the state. The remainder of the appropriation is divided between the expenses of the educational commissioners, the superintendent of public instruction who is the head of the school system of the state, the state water survey and special provision for deaf and blind children.

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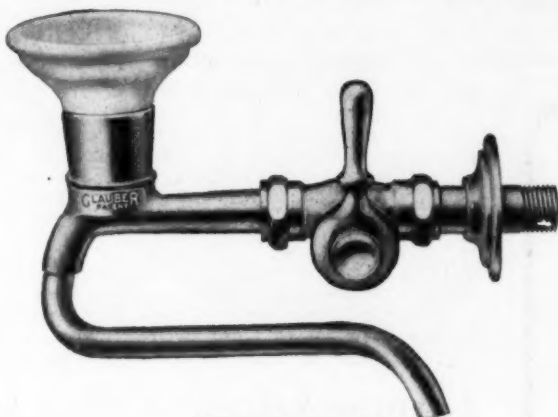
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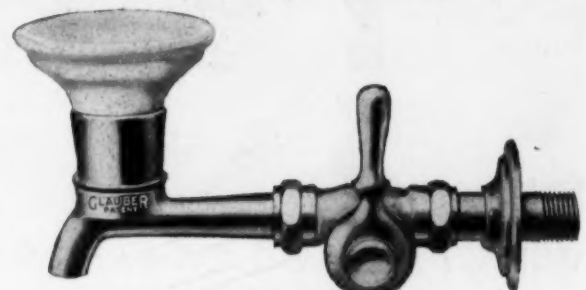
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Material Equipment of North Carolina Schools Increases in Value.

One of the striking lines along which public education in North Carolina has made progress since the educational campaign of 1900 is the improvement in the material equipment of the schools. Starting with property valued at hardly more than a million dollars, an average of more than one schoolhouse a day has been constructed and additions and improvements have been made until the value of state school property has reached the ten million mark. During the past fourteen years from 1902 to 1915, there have been erected 5,330 new schools or an average of one for each day.

The improvement in the character of the buildings has been even more remarkable. Where formerly there were nearly 1,200 log schools, now there are very few to be found in any section of the state. Ventilation has been improved and window lighting made more comfortable and healthful for the pupils by the general adoption of unilateral lighting. Where the climatic conditions are unusual, an occasional transom or half-window has been provided at the rear of classrooms, to give additional ventilation. In almost every case, the cloakrooms are arranged to insure cross ventilation.

The State Department of Education has prepared and issued plans of school buildings of from one to six rooms, designed in accordance with modern schoolhouse practice. The plans are issued in the form of a bulletin and are revised from year to year. North Carolina was the first Southern state and one of the first states in the entire country, to publish a bulletin of this character.

In a large measure, the remarkable progress of the state in schoolhouse construction has been directly attributable to the aid afforded weak school districts thru the state loan fund for building and improving schools. Of the five thousand new buildings erected since the first loan was made in 1903, about 1,750 or more than one-third have been built with the direct aid of the fund. The loans often make possible the immediate erection of buildings where it would otherwise be impossible because of local inability to

bond or to levy a sufficient tax. It also insures that a substantial and properly constructed building is erected instead of a cheap, poorly constructed structure.

From a small beginning the state loan fund has grown until it now amounts to between \$500,000 and \$600,000. There has been lent from it since its establishment more than a million dollars, every cent of which has been used for new buildings and for improving existing structures. The schools erected from the fund are scattered over 98 counties and represent a total value of \$3,500,000 or about one-third of all the school property of the state.

Since the establishment of the fund, the demand for loans has been greater than the available amount at the command of the Education Department, and it is estimated that the present school year will see property valued at more than a quarter of a million dollars added to the material equipment of the schools.

BUILDING AND FINANCE.

Minneapolis, Minn. The cash payment of discountable bills inaugurated by the board in April last, has resulted in a total saving of \$2,028.68 for a period of five months, according to the secretary. The discounts were obtained on bills amounting to \$49,862.05, the rates running from two to five per cent. It is estimated that the average year's business in discountable bills amounts to \$150,000.

Cleveland, O. The high school lunchrooms took in more than \$50,000 in eleven buildings during the past year, according to a report of Dr. E. A. Peterson, supervisor of the lunchrooms. Of this amount, directors of the lunchrooms received more than \$7,000 in concessions.

During a three-year period, the high school lunchroom business has more than doubled, while the increase of last year over the year previous amounted to \$15,000. The largest business was transacted at the East Technical High School where the receipts were \$9,000 for a period of nine months.

The school medical inspector supervises the purchase of food for the lunchrooms, controls the price and superintends the service. A director of the kitchen and dining room is employed and

pupils of the domestic science classes assist in the preparation of food.

Hastings, Neb. A comprehensive building program, providing for the erection of three schools, the completion of a third and a proposed appropriation of \$175,000 has been recommended to the board by Supt. Everhart. One of the structures contemplated is an administration building to cost \$5,000.

The city of St. Louis has been given the sum of \$1,951,042.27 as its share of the Missouri state school fund for the ensuing year. It represents one-third of the ordinary receipts of the state revenue fund for the year ending June, 1916, and is \$337,562.47 larger than the first apportionment made by the state auditor to the schools in 1915, and \$3,373 larger than the first allotment made by the auditor and the \$334,189 additional, obtained for the schools in that year thru mandamus proceedings.

According to Attorney General Gamble of Louisiana, tax collectors and assessors are to receive exactly the same commissions for the collection of school taxes and for their assessment, from now until the laws placing them on a salary basis, become effective, as they received in the past. Commissions to be paid sheriffs after the salary-basis law goes into effect in 1917, for the collection of school taxes, will be the same as those allowed at present. The opinion was given to the state superintendent as a guide until the new law goes into effect.

Worcester, Mass. The rules committee of the board has approved a resolution which provides a uniform basis on which school janitors may be pensioned or receive pay during illness. For purposes of paying sick benefits, no janitor may receive more than \$20 per week, or 25 per cent of his salary for a period not to exceed four weeks for men who have served less than ten years. For those who have been in service more than ten years, the rate is 50 per cent the first week and 25 per cent for the succeeding three weeks.

Oklahoma City, Okla. The cost of operating the schools has increased from \$362,889 in 1915-16 to \$421,705 in 1916-17, the teaching force from 353 to 380 teachers, and the enrollment from 10,450 to 11,050 pupils.

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Board of Education, Philadelphia, Pa.

Board of Education, Boston, Mass.

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HYGIENE AND SANITATION.

Fort Wayne, Ind. An open-air school for nervous and physically subnormal children has been opened.

Boston, Mass. Under the direction of Miss Bessie Forbes, the new head of the school lunchroom, children will be provided with wholesome lunches at a small cost. The daily fare will consist of soup, one hot dish, two sandwiches of whole wheat bread, a dessert and cakes. The food is prepared and served at the schools.

Webster, Mass. A school nurse has been appointed.

Pekin, Ill. The board has discontinued the teaching of physical culture in the grade schools.

Stockton, Cal. The board has reorganized the medical inspection department with the appointment of two physicians as city and county inspectors respectively and the appointment of two nurses to work under the physicians. The doctors will serve without pay and the nurses will be paid a stipulated amount to be agreed upon later. The nurses will carry on the inspections and perform their duties in accordance with the advice of the physicians.

Indianapolis, Ind. The school board has adopted a rule requiring each teacher to undergo an examination for evidences of tuberculosis or other communicable disease. Both teachers and pupils are required to present certificates showing that they have been vaccinated against typhoid fever.

Sioux Falls, S. D. A new rule of the board provides that students shall present certificates of health from the medical department before entering classes.

A school nurse has been engaged by the school board at Great Falls, Mont. The nurse will work with the medical inspector and will devote her entire time to routine inspections and follow up work in the homes.

Newton, Mass. The school board has prepared an outline of physical training work, which is intended to develop boys in the secondary schools. Modified forms of military drill, the development of natural instincts for group work, outdoor and camp life, will be utilized as far as the schools are able to comply.

The plan is as follows:

1. That the time for all boys be increased to the equivalent of three 60-minute periods per week for four years, or some other suitable time to be agreed upon by experts in this line of work. Probably not less than two hours would be outside of school time, lengthening the school work by two hours. That this be compulsory for all boys unless a doctor's certificate of inability be presented, in which case, suitable corrective work should be substituted to meet the special physical needs of the individual. That suitable exercises in physical training, including swimming be given, and that physiology and hygiene be taught to all first year boys.

2. That at the end of the first year boys elect either

- a) Three years of physical training, physiology, hygiene and sanitation, with the opportunity for additional electives in athletics, or

- b) Three years of calisthenics, personal hygiene, military science and history, tramping and training to develop the ability to take care of themselves in the open—pitch tents, cook food, etc., with such amounts of military drill and tactics as many seem best fitted to the age and size of the boys in the different years. This group would be allowed to elect, with the consent of the parents, target practice with rifles of a size suited to the development of the boy; they would also be allowed to elect a period of two weeks in a summer camp to be conducted during the summer vacation.

Los Angeles, Cal. A reorganization of the medical inspection department looking toward a more efficient and less expensive system is planned. In the past, a large corps of physicians and dentists has been employed. These inspectors gave a portion of their time to the work and drew a total salary of \$32,000. In the future, it is planned to employ a smaller corps of workers and to demand that they give their entire time to the work.

Washington, D. C. An amendment to the District's tuberculosis regulations, recently adopted, prohibits the attendance at public or private schools, of any person suffering from tuberculosis in communicable form. The rule applies alike to teacher, pupil and janitor and is effective October first.

McLeansboro, Ill. Dental inspections of school children have been begun by a corps of volunteer dentists.

Chicago, Ill. President Jacob Loeb has approved the recommendation of Health Commissioner Robertson that a student health commissioner be assigned in each of the three hundred schools. The officers are to be appointed from the higher grades and are to be trained by the health department for co-operative work in connection with the improvement of sanitary conditions in the schools.

Haverhill, Mass. Dental inspections have been begun in the schools. For the present year, the work will be confined to pupils in the first grade. A dental clinic has been installed in the basement of one of the schools.

Minneapolis, Minn. The board of education has undertaken the direct control of the open air school formerly conducted under the auspices of the open air school committee. A maintenance gift of \$3,000 has been included in the transfer of authority.

Louisville, Ky. A separate department of school lunches has been formed by the board. The department which is intended to provide wholesome lunches at cost prices, has been placed under the direction of Mrs. Mason Maury and Mrs. E. L. Tachau, who conducted the school lunchrooms last year.

The department is to have direct charge of the purchase of food supplies, their storage at the central station and the transportation of the same. The directors are to receive \$1,500 a year jointly, and they are to pay the salaries of all persons hired to assist the directors and all incidental expenses incurred.

Reading, Pa., has temporarily reorganized its corps of medical inspectors by electing a chief inspector at a monthly salary of \$75, and two assistant inspectors at \$50 per month. The school dentist, who has been employed several years, has been re-elected at a monthly salary of \$60 and five nurses have been employed at \$50 per month each. The medical inspectors will devote several hours daily to routine inspections, the school dentist will be on duty three hours each school day, and the nurses will devote their entire time on school days to their work.



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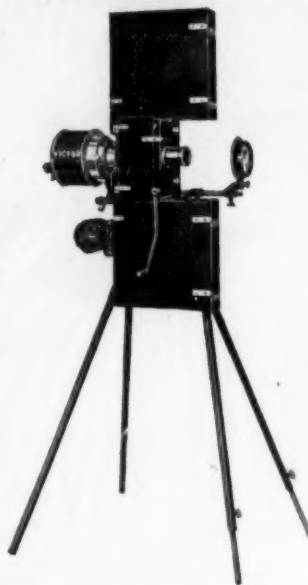
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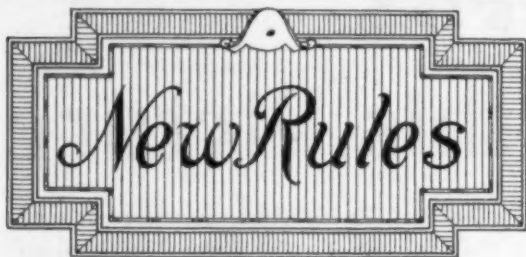
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Rules for Janitors.

The school board of Reading, Pa., has adopted the following revised rules for engineers and school janitors:

1. Janitors shall be under the immediate supervision of the Superintendent of Buildings.
2. Janitors shall keep the school buildings and grounds clean, attend the fires, and carefully clean and whitewash the school buildings during the summer vacation. They shall furnish all tools, implements, and materials necessary to the discharge of their duties.
3. Janitors and their assistants shall be on the school premises at 8:00 o'clock a. m., and at 1:00 o'clock p. m., or at any such hours as the Superintendent of Buildings shall designate and remain during the entire sessions of the school.
4. Janitors shall wash, at least once each week, the doors and door-knobs of schoolrooms and the hand-rails and banisters of stairs with a solution provided by the Superintendent of Buildings.
5. Janitors shall keep clean and free from soot, ashes, and dust, all smoke-pipes, boiler-tubes, and sections, and the tops of all smoke, steam and water pipes.
6. Janitors shall keep ash-pits free from accumulation of ashes and cinders and take every care of the grates, in order that they may not be ruined by neglect.
7. Janitors shall thoroly ventilate every classroom, at the close of each school-day, by opening windows and doors, except in cases of storm.
8. Janitors shall use every precaution for the protection of school property, and shall have all the gates and doors leading from the buildings and yards unfastened, and the windows of the

buildings unlocked on all school days before the time of opening school; and at any such times as the Superintendent of Buildings shall designate; and, unless otherwise directed by the principal, janitors shall lock them thirty minutes after the close of the school session.

9. Janitors shall, in case of fire, immediately sound the alarm.

10. Janitors shall place receptacles provided by the Board of School Directors at convenient places for refuse, and not permit it to be temporarily placed in waste baskets, boxes or receptacles in rooms or cellar, nor thrown outside of the building.

11. Janitors shall engage in no other occupation without consent of the Committee on Property and Sanitation.

12. Janitors shall assist the teachers in gathering the pupils at the opening of school, supervising pupils in basement at recess period, and in clearing the buildings and grounds at the close, and permit no loitering nor noise in the halls nor about the buildings.

13. Janitors shall not offer nor expose for sale any eatables, such as candies, fruits, cakes, etc., nor any other article, nor permit others to do so on the premises of the School District of Reading, Pa.

14. Janitors shall keep the sidewalks and school surroundings clear of snow and ice during the winter months, and under no consideration leave obstructions on the pavements leading to the school.

15. Janitors shall attend to minor repairs without notifying the Superintendent of Buildings. If, however, the repairs are of such nature that the Janitor cannot fix them, the Janitor shall report such to the Superintendent of Buildings at once.

16. Janitors unable to attend to duty on account of sickness, shall be entitled to half-pay, during a period not exceeding four consecutive weeks, nor less than one day. Notice of such sickness shall be given the Secretary in writing.

Rules for Quarantine.

Brockton, Mass. The city board of health has distributed among the respective schools a new set of rules governing quarantine and the exclu-

sion of children from the schools. The rules read:

1. Exclusion of infected children from school. Children who are or lately have been infected with any disease dangerous to the public health shall be excluded from all schools and gatherings of children, during the following periods and until given a permit from the board of health:

Anterior poliomyelitis, six weeks.

Chickenpox, until the skin and mucous membrane crusts have healed.

Diphtheria, culture for release not to be taken until at least five days from date of report of case; two successive negative cultures required from the nose and throat at intervals of 24 hours for release.

German measles, until seven days after appearance of the eruption.

Measles, until ten days after the appearance of the eruption and until all discharges from the nose, ear and throat have disappeared and the cough has ceased.

Mumps, until two weeks after the appearance of the disease, and one week after the disappearance of the swelling.

Scarlet fever, until thirty days after the development of the disease and until all discharges from the nose, ear, throat and suppurating glands have ceased.

Smallpox, until fourteen days after the development of the disease and until crusts have all separated and scars healed.

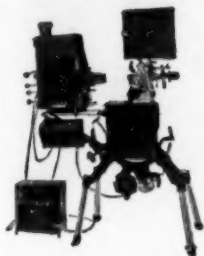
Typhoid, until recovery.

Whooping cough, until six weeks after the beginning of the disease, or until one week after the last characteristic cough.

Spinal meningitis, three weeks, or until a permit is issued by the board.

2. Exclusion from school of other children in infected families. Children who are members of a family where a case of contagious disease dangerous to the public health exists, or who have been exposed to such a disease, shall be excluded from all schools and gatherings of children during the following incubation periods or until a permit is granted by the board of health.

Anterior poliomyelitis, until released from quarantine.



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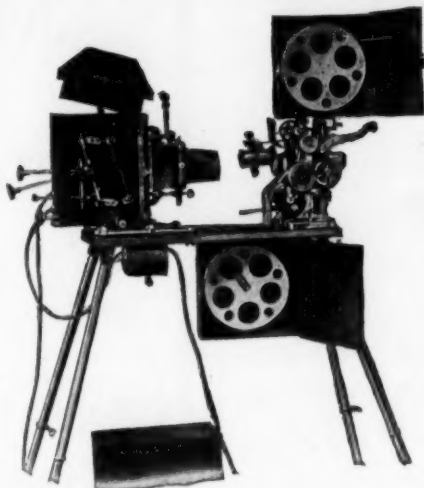
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Pictures.***

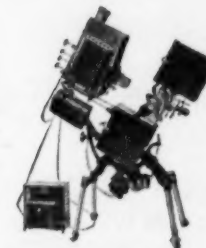
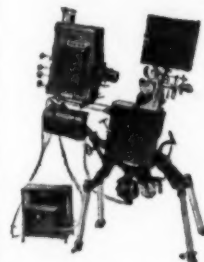


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WRITE FOR CATALOG A, WITH FULL PARTICULARS

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Chickenpox, only the child who has the chickenpox will be excluded from school; any other child in the family may attend school.

Diphtheria, no child may attend school from this quarantined family, except under these conditions. Should the child who has the diphtheria be removed to a hospital, or in case of death, after the expiration of eight days, if cultures from the nose and throat of the other children in the family are negative, they may attend school.

German measles, no other child may attend school from the family where there is a case of german measles, until seven days have elapsed. A child who has had the measles may leave home, and after 48 hours, may then have a permit to return to school.

Measles, no child shall attend school from a family where there is a case of measles until ten days from the time the case is reported. Should the other children in the family, who have previously had the measles, leave home, after 48 hours they may have a permit to attend school.

Mumps, only the child who has the mumps is excluded from school.

Scarlet fever, no child may attend school from a family where there is a case of scarlet fever. If the patient is removed to a hospital, or in case of death, the other children may return to school eight days after the first exposure.

Smallpox, no child may attend school from a family where there is a case of smallpox. If the patient is removed to a hospital, or in case of death, children may return to school after 21 days.

Typhoid fever, only the child who has the typhoid is excluded.

Whooping cough, the child who has the whooping cough is excluded from school. Any other child in the family who has previously had the whooping cough may attend school. Children who have never had it cannot attend school.

Spinal meningitis, no child shall attend school from a quarantined family, until the quarantine is released.

3. Exclusion from school of other children exposed in other families in a block or tenement. Children who are living in a block or tenement

in which there is a case of disease dangerous to the public health, shall be excluded from all schools and gatherings of children during the following incubation periods and until a permit is granted: Anterior poliomyelitis, 21 days; chickenpox, only the child who has the chickenpox is excluded; German measles, only the child who has the measles and the other children in the immediate family are excluded; measles, children in other families in the block or tenement may attend school on presentation of a certificate; mumps, only the child in the family where the case occurs is excluded; scarlet fever, all other children in a block or tenement shall be excluded from school for eight days; smallpox, all other children in the block or tenement shall be excluded unless recently successfully vaccinated; typhoid fever, all other children may attend school; whooping cough, all other children may attend school; spinal meningitis, no child shall attend school until a permit is granted.

NEW RULES AND REGULATIONS.

Westfield, Mass. The board has ordered that children be vaccinated before being admitted to classes.

Milwaukee, Wis. The rules committee of the board has adopted a resolution allowing school nurses twenty-days' absence on sick leave with half salary. The board is considering a new rule requiring that children who at the age of 6 years, cannot do the work of a 4-year-old, shall be segregated from the regular pupils. It is planned to transfer such pupils to the state schools at Chippewa Falls and Union Grove.

Fond du Lac, Wis. The board has adopted a resolution thru which teachers are required to follow the course prescribed by the board, except where the matter has been approved by the superintendent. In the past teachers have been given considerable latitude in the matter of special features.

The rule reads:

"The work taught in the public schools shall be that prescribed by the board of education. No work in the nature of drills, exercises, essays, competitive contests, sales, soliciting or instruction shall be allowed at the request of any person

or persons except with the approval of the superintendent of schools."

Salem, Ore. The board has fixed the tuition fee for non-resident students at \$72.57. The present amount includes interest and depreciation expenses, and is a departure from the method recommended by State Supt. Churchill who holds that these items should not be taken into consideration in fixing the tuition.

Taylorville, Ill. A compulsory course in physical culture has been introduced in the schools in compliance with a new state law.

Beginning September 5th, six-year courses were inaugurated in the high schools of Detroit, Mich. The new Nordstrom High School which has just been occupied, is also a six-year school. In the opinion of the school authorities, the six-year system has a tendency to relieve crowded conditions in neighboring elementary buildings.

A lack of supervised study in the high school is the cause of the failure of many students, according to E. R. Edwards, State High School Inspector of North Dakota. According to Mr. Edwards, many pupils fail because when they sit down to study they soon encounter some difficulty in the form of something not understood and either become discouraged or use so much time vainly trying to master some one thing that further preparation is neglected.

Mr. Edwards urges upon high school principals the need for special periods of each day to be devoted to supervised study. These periods should be times for clearing up difficulties and for giving advice on the work of the students. The Fargo system of supervised study is especially commended by Mr. Edwards, because of its good effects as shown in scholarship and wholesome school spirit. When school closes for the day, no one need be detained.

Davenport, Ia. The school board has asked Supt. F. L. Smart to make a special study of the possibilities of an intermediate school. It is planned to distribute the three upper grades and the first year of the high school in three separate buildings.

Saugus, Mass. A Junior High School Building is in course of erection. The building will cost about \$75,000.

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Belfast, Me. The board has returned to the one-session plan for the high school.

Philadelphia, Pa. The board has ordered that the high school day be lengthened one hour, beginning with the first of October and ending with the close of the fall term. The longer school day is necessary to make up time lost thru the infantile paralysis quarantine.

Pittsburgh, Pa. A total of fourteen committees of principals and teachers of high schools have been appointed by Supt. W. M. Davidson to devise new methods of instruction for students in the upper grades.

Under the plan, each committee is to prepare a syllabus on some particular branch or branches of study and submit a preliminary report to Supt. Davidson. The final report which is to be made not later than January first, is to be printed and distributed among the teaching staff with the opening of the second term in February.

In outlining the work to be done, Dr. Davidson made a brief but clear explanation of the purpose of the new course. He pointed out that while a dead level of uniformity in high schools is most undesirable because of its effect on the teacher and pupil, still a proper and reasonable degree of uniformity in the work of the several schools is essential to proper development. It is the purpose of the course to establish within the teaching force a uniform point of view with respect to the course of instruction. Special attention is to be given to the arrangement of a flexible system that shall obviate lockstep methods and give to the student the widest possible latitude in the selection of subjects.

The first mid-year graduation for the high schools will occur in February, 1917, when the mid-year senior classes will leave the schools.

Middletown, Conn. An employment bureau has been opened in the high school for the benefit of students who desire work after school hours. Any citizen who has work that students can do is urged to communicate with the bureau.

Ashtabula Harbor, O. A Junior High School comprising the seventh, eighth and ninth grades, has been opened in the high school building.

Marlboro, Mass. A Junior High School has been opened in the Center School.

Sioux City, Ia. The board is considering the adoption of a checking system by which it is proposed to eliminate truancy among the high school boys.

According to the plan, tickets are to be issued to the teachers for each member of the class. At the end of the class period, the tickets of delinquents are to be collected by a clerk or student and taken to the office. If the office fails to locate the truant, the parents or guardians will be communicated with at once. The school has an enrollment of about 1,500 students.

Springfield, Ill. The board has granted additional privileges to seventh-grade students thru the discontinuance of district boundaries and a choice of attendance at the eighth grade school or the Junior High School. The city has four of these schools.

Minneapolis, Minn. The board proposes the extension of the junior high school plan with the purpose of adjusting the schools to the needs of the individual and the community. The change involves the reorganization of the senior high school in co-operation with the Dunwoody Institute and the Girls' Vocational High School.

Waltham, Mass. A two-year commercial course has been introduced in the St. Charles School. The course is the beginning of high school work in the school.

Easthampton, Mass. A Junior High School has been established at Payson Hall.

Fond du Lac, Wis. A teacher-training school has been established in the high school. The course covers four years but graduates of the school may complete the work in one year. Completion of the work entitles the student to a Normal School credit.

Butte, Mont. A lunch counter has been opened at the high school.

Palo Alto, Cal. A course in Spanish has been introduced in the high school.

The new High School at Dover, Ohio, was dedicated on September 4th. The building contains fifty rooms devoted to instruction, laboratory and shop purposes. Coincidentally with the opening of the school a new course of study arranged by Supt. F. P. Geiger and Mr. S. O. Mase, Principal, was put in force.

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of Award

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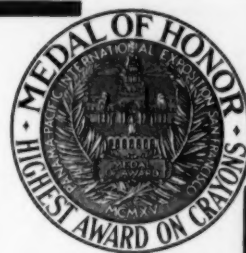
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The establishment of a complete advisory system for the high school at Springfield, Mo., along the plan of the large high schools of the country, has been suggested by Principal E. E. Dodd of the school. The system is designed to bring the faculty members in closer touch with the students, and to give the individual student closer supervision and competent advice on the problems that confront him in school work.

The new plan provides for the division of the entire student body of 1,072 students into groups of from thirty to forty students each. Each section will be under the direction of a faculty member, who will act in the capacity of advisor.

The division of the students into groups allows the instructors to get into closer personal touch with the students than is possible under the general supervisory system now followed. Under the regular plan, none of the faculty members are particularly responsible for any individual student. They are not able to become acquainted with all the students and rarely get into personal touch with any of them.

Under the advisory plan, the faculty members in charge of the different groups, will look after the grades of the students, assist in the mapping of courses of study adapted to the individual, assist in the solving of difficulties, control the conduct of the students, and in a general way better the individual work of the students with the aid of their experience.

SPECIAL STUDIES.

Dallas, Tex. A course in playground work is to be offered this year by the kindergarten training school conducted under the direction of the Free Kindergarten Association. The course will include a number of lectures, covering the theory of play, various phases of child psychology and a number of practical field demonstrations. The course is intended for professional directors already in the work who desire to broaden their knowledge, and for grade teachers in the schools.

Minneapolis, Minn. The Minnehaha School has \$1,289.37 in school savings and a percentage of 92 in the relation of deposits to attendance. The Jackson School has \$2,216.89 in deposits and the Adams School has \$3,823.67.

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LaSalle, Ill. Special instruction in violin music has been introduced in the schools. A private instructor has been employed to give a part of her time to the grades.

Denver, Colo. An opportunity school, offering work in the manual arts and business subjects, has been opened in the Longfellow grade school. In addition to the special subjects there will be instruction in the subjects of the elementary school.

Massillon, O. A school savings system has been introduced in the schools.

The school authorities of St. Paul, Minn., have entered into a three-year contract with the A. N. Palmer Company for the use of the Palmer writing system in the schools.

Galesburg, Ill. A system of school savings has been introduced in the schools.

Beardstown, Ill. A school savings system has been adopted.

A slant system of writing will be taught in the schools of Kansas. The state board of education has adopted a new series of writing books to replace the vertical books used since 1895.

The school board of Wheeling, W. Va., has purchased an old, roomy, Southern mansion for the home economics department. This purchase was due to a suggestion by Supt. C. E. Githens. The pupils will undertake the work of refinishing the interior and will also furnish the necessary equipment for a complete home.

COMING CONVENTIONS.

Oct. 2-6—Playground and Recreation Association of America at Grand Rapids. H. S. Braucher, Secy., New York City. Probable attendance, 700.

Oct. 5-7—Southern Minnesota Teachers' Association at Mankato. Miss Kate Sparrows, Secy., Mankato. Probable attendance, 500. There will be an educational exhibit.

Oct. 11-13—Upper Peninsula Educational Association—Michigan at Menominee. J. E. Lautner, Secy., Marquette. Probable attendance, 1,200.

Oct. 12-14—Illinois Valley Section—Northern Illinois Teachers' Association at Moline. W. R. Foster, Secy., Ottawa. Probable attendance, 1,500. There will be an educational exhibit.

Oct. 12-14—Vermont State Teachers' Association at Burlington. Etta Franklin, Secy., Rutland. Probable attendance, 1,500. There will be an educational and commercial exhibit.

Oct. 13—Massachusetts Superintendents' Association at Worcester. Albert Robinson, Secy., Peabody. Probable attendance, 150.

Oct. 13-14—Central Wisconsin Teachers' Association at Wausau. Wm. Milne, Pres., Merrill. Probable attendance, 500.

Oct. 17-19—New York State Council of Superintendents at Poughkeepsie. Rovillus R. Rogers, Pres., Jamestown, N. Y. Probable attendance, 150.

Oct. 19—New Hampshire Teachers' Association at Concord. Harriet S. Emmons, Secy., Concord. Probable attendance, 1,250.

Oct. 20-21—North Wisconsin Teachers' Association at Ashland. Lida E. Doolittle, Secy., Ashland. Probable attendance, 350. There will be an educational and commercial exhibit.

Oct. 21—Massachusetts Teachers' Federation at Cambridge. Ernest Makechnie, Secy., Somerville. Probable attendance, 125.

Oct. 24-25—Indiana City Superintendents' Research Club at La Porte. E. J. Llewellyn, Secy., Mt. Vernon. Probable attendance, 30.

Oct. 25—Indiana Town and City Superintendents' Association at Indianapolis. C. E. Derbyshire, Secy., Portland, Ind.

Oct. 25-27—Indiana State Teachers' Association at Indianapolis. J. B. Percy, Secy., Indianapolis.

Oct. 25-28—Washington Educational Association at Spokane. O. C. Whitney, Secy., Tacoma. Probable attendance, 4,000.

Oct. 26-27—Maine Teachers' Association at Portland. Glen W. Starkey, Secy., Augusta.

Oct. 26-28—Rhode Island Institute of Instruction at Providence. M. Davitt Carroll, Secy., Providence. Probable attendance, 2,200. There will be a commercial exhibit.

Oct. 26-28—East Tennessee Teachers' Association at Knoxville. D. S. Burleson, Secy., Johnson City. Probable attendance, 1,000.

Oct. 26-28—Western Section—Northern Illinois Teachers' Association at Dixon. Lewis Reisner, Pres., Belvidere.

Oct. 26-28—Northwestern Section—Northern Illinois Teachers' Association at Dixon. Ida Voight, Secy., Freeport. Probable attendance, 1,000.

Nov. 1-4—Minnesota Associated School Boards—Minnesota Educational Association at St. Paul. Mrs. H. Witherstine, Secy., Rochester, Minn.

Nov. 1-4—Minnesota Educational Association at St. Paul. Miss Isabel Williams, Pres., St. Paul.

Nov. 2-3—Michigan State Teachers' Association at Grand Rapids. John P. Everett, Secy., Kalamazoo. Probable attendance, 7,000.

Nov. 2-4—Colorado Teachers' Association at Denver. H. B. Smith, Secy., Denver. Probable attendance, 3,000. There will be an educational and commercial exhibit.

Nov. 2-4—Wisconsin State Teachers' Association at Milwaukee. M. A. Bussewitz, Secy., Milwaukee.

Nov. 8-10—Nebraska State Teachers' Association at Omaha. E. U. Graff, Secy., Omaha.

Nov. 9—School Board Section—Nebraska State Teachers' Association at Omaha. L. H. Thornburg, Secy., Alexandria. Probable attendance, 200.

Nov. 9-10—Kansas Association of Mathematics Teachers at Topeka. Eleanor Harris, Secy., Hutchinson. Probable attendance, 150.

Nov. 15-17—North Dakota Educational Association at Fargo. W. E. Parsons, Secy., Bismarck.

Nov. 16-17—Association of Colleges and Secondary Schools of the Southern States at Durham. Bert E. Young, Pres., Nashville, Tenn.

Nov. 16-18—Missouri Negro Teachers' Association at St. Louis. C. G. Williams, Secy., Boonville.

OPENS NEW YEAR.

The Gregg Writer, which is devoted to the promotion of the Gregg system of shorthand and to the cause of commercial education in general, began its nineteenth year with the September issue. The new volume has a new typographical dress and has been considerably improved both editorially and mechanically. Superintendents of schools and teachers of commercial subjects may obtain a subscription to the Gregg Writer by addressing the Gregg Publishing Company, 77 Madison Ave., New York City.

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THE PRANG COMPANY'S NEW BUILDING.

Of the school book publishers who have specialized in art education, the Prang Company has been the pioneer, both in time and in presenting to American schools, new methods in art teaching. Louis Prang who organized the business sixty years ago, was the first American lithographer to reproduce oil paintings in full color and to publish fine Christmas cards and valentines. His interest in both art and education led him to print the first drawing books for school use. To his energetic and sacrificing work is largely due the early extension of elementary art instruction and the introduction of water colors.

For thirty years the Prang Company was one of a small group of Boston houses which published the bulk of American textbooks. The firm removed its main office to New York about 1886, when its growing business thruout the country demanded closer contact with the schools of the country.

Within the past two months, the firm has again removed its home office, this time to Chicago. This change calls attention to the fact that Chicago is rapidly becoming important as a publishing center, particularly of school books. It is an economical axiom that the point of manufacture of any product should be near the source of supply and at the center of its market. Western authors are writing an increasing number of successful textbooks for the country, and Chicago is a natural manufacturing and shipping center for all school book publishers. The Prang Company is the first of the old Boston houses to make Chicago its home office.

In order to accommodate the increasing bus-

iness of the Chicago headquarters, the company has purchased the beautiful building shown in the illustration on this page. The building is located at 1922 Calumet Avenue, in the center of what was formerly the most exclusive residence district on the south side. The building was erected by the late Marshall Field at a cost of \$250,000 and was designed by the well known architect, Daniel H. Burnham. It is wholly fire-proof and has one of the finest colonial interiors in the city of Chicago.

The house is situated directly on the lake and is separated from the shore only by a beautiful park. The grounds are beautifully laid out and are enclosed with a high wrought-iron fence. After very few minor alterations the house has

been occupied exclusively for the offices of the firm and for lunch and rest rooms for the employees.

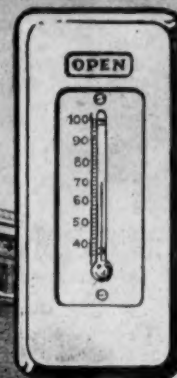
The new Prang building is located in the center of the new school publishing district, which has grown up in Chicago within recent years between Eighteenth and Twenty-second Streets. It can be reached within a few minutes' ride on any Cottage Grove car going south on Wabash Avenue.

New Historical Maps.

The McConnell School Supply Company which removed its offices and factory from Philadelphia to Chicago during the past summer, has announced the publication of a series of pupils' Maps of American History.



New Home of the Prang Company at 1922 Calumet Avenue, Chicago.



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PERSONAL NEWS OF SUPERINTENDENTS

Mr. John W. Shideler, formerly principal of the Hawthorne School, Sioux City, Ia., has resigned to accept the superintendency at Vermillion, S. D.

Mr. John F. Scully of Arlington, Mass., has been elected superintendent of schools at Brockton, to succeed George L. Farley.

Mr. Wells A. Hall, formerly principal of the high school at Concord, Mass., has been relieved of the duties of that position, in order that he may devote his entire time to the superintendent's office. Mr. W. B. Goddard has been elected as his assistant.

Mr. B. E. McCormick, formerly principal of the high school at La Crosse, Wis., has been appointed superintendent of schools to succeed L. P. Benezet. Mr. McCormick is succeeded in his former position by Mr. Samuel E. Tift.

Mr. S. P. Waltrip, formerly principal of the Brunner School, Houston Heights, Tex., has been appointed superintendent of schools for the ensuing year.

Mr. H. H. Faust, formerly principal of the Washington School at Hibbing, Minn., has been elected superintendent of schools at Janesville, Wis.

Mr. Frederick B. Darling of Walton, N. Y., has entered upon his duties as superintendent of schools at Dunkirk, N. Y. He succeeds N. L. Englehardt.

Tiffin, O. The board has raised the salary of Supt. C. A. Krout from \$2,000 to \$2,250 per year.

Mr. Clyde M. Hill of Springfield, Mo., has been appointed Supervisor of Junior High Schools for the state of Vermont. Mr. Hill will have under his direction the eleven junior high schools of the state. These include the four old ones and seven newly established schools.

Mr. Hill previous to his appointment in Vermont, was an instructor in the Missouri State Normal School and director of the model junior high school.

Mr. B. O. Skinner of Athens, O., has entered upon his duties as superintendent of schools at Marietta. Mr. Skinner was elected for a three-year term, at a salary of \$2,300 per year.

Mr. F. B. Knight of Ipswich, Mass., has been elected superintendent of schools at Danvers, with a substantial increase in salary.

Mr. James F. Hosic has been granted a leave of absence from the Chicago Normal College to pursue advanced studies in English at Teachers College, Columbia University.

Mr. F. O. Randall, formerly superintendent of schools at Moscow, Idaho, has been elected principal of the Flathead County High School at Kalispell, Mont.

Mr. B. Floyd Stalcup, formerly superintendent at Veedersburg, Ind., has assumed charge of the schools at Paulding, Ohio.

Mr. Charles M. Parker, editor and publisher of the *School News*, died at Decatur, Ill., on August 25, following a long illness. Mr. Parker was the publisher of a list of school classics and of general educational books, and was one of the strong leaders in educational affairs in Illinois. Mr. Parker has been succeeded in his work by his wife and his son, Roy Parker. The *School News* will be continued along the lines conducted by Mr. Parker.

The Buffalo school board has appointed Mr. Charles A. McMahon to conduct a survey of the school system.

Dr. A. F. Nightingale and his wife celebrated the fiftieth anniversary of their wedding on August 24. Dr. Nightingale, previous to his retirement, two years ago, was identified with educational work in Chicago and Cook County for a period of 46 years.

George W. Beasley, city superintendent of schools of Peoria, Ill., asked and received a reduction of his salary. He was appointed this spring and allowed \$4,000 a year. To save him

the payment of income tax, the board made his salary \$3,999.99.

George N. Child, for a number of years supervisor of the grammar grades of the Salt Lake schools, has been appointed assistant superintendent of schools. In his new position, Mr. Child will work under the superintendent and will also act as supervisor of the grammar grade department. The promotion carries with it a salary of \$3,400.

Mr. George C. Minard of Bristol, R. I., has resigned to become superintendent of schools at Arlington, Mass.

Mr. John M. Mills, of Ogden, Utah, has accepted the position of assistant to Supt. W. A. Wirt of Gary, Ind. Mr. Mills will devote a portion of his time to visitors at the schools and the remainder to lectures on the Gary system.

The Wisconsin State Department has recently been enlarged by the employment of four state supervisors as follows: Miss Maybell Bush, Supervisor of City Grades, Mr. S. M. Thomas, Supervisor of High School, Mr. J. M. Dorrans, Supervisor of Manual Training, Dr. W. W. Theisen, expert in educational tests.

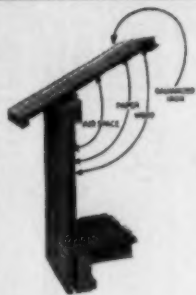
Mr. W. F. Webster, recently named as assistant superintendent of schools at Minneapolis, Minn., has been assigned to the West High School.

Mr. E. N. Bonnell has been appointed Director of Night Schools at St. Paul, Minn.

Miss Alice Russell has been appointed Supervisor of the Schools for Exceptional Children at Denver, Colo.

Mr. A. N. Farmer, formerly with the Wisconsin School Survey and later educational organizer for the National Cash Register Company, has been chosen advisor to the school board of District No. 5, at Evanston, Ill.

Miss Carrie A. DeNike has been unanimously elected as president of the board of education at Salamanca, N. Y. Miss DeNike is the first woman to be elected to the board, or to any office in the city. She was elected as one of the two members at large at the first election held three years ago, and at the last election, was re-elected to the same office.



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THE MONTCLAIR HIGH SCHOOL.

(Continued from Page 29)

dling 6,000 cu. ft. of air per minute, two toilet room exhaust fans each handling 3,000 cu. ft. per minute and one laboratory fume exhaust fan discharging 900 cu. ft. per minute. The last named fan is connected to the fume hoods in the chemical laboratory.

The plumbing work is very high grade throughout and consists of automatic compression water closets with local vent connection into alberene stone vent spaces back of the fixtures. These vent spaces are carried up and connected to the toilet exhaust fan. The teachers' and special water closets have oil operated flush valves. The urinals are of trough type built of alberene stone and are also locally vented; they are flushed with vitreous automatic flush tanks.

The lavatories are wall hung without backs and have faucets concealed under the slab with only the push button exposed. The water enters a mixing chamber formed in the lavatory and after mixing pours into the bowl thru a small orifice thus giving the advantages of tempered water with practically no metal work exposed above the top of the fixture. All exposed metal work around the plumbing fixtures is of red metal except that underneath the lavatories and sinks where it is of brass enameled white.

The drinking water fountains are of wall hung type vitreous ware with vitreous bubbling cup and hand control.

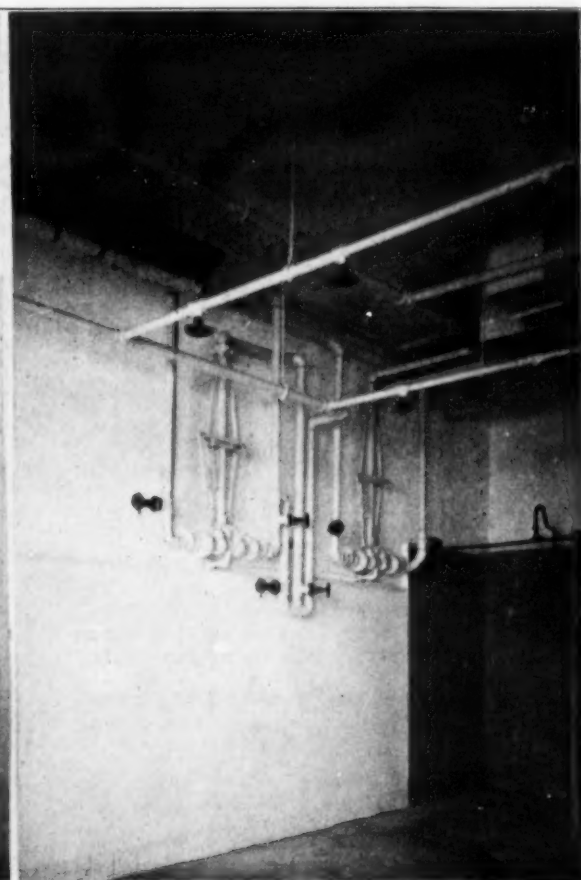
In connection with the gymnasium, individual girls' showers are installed with slotted heads on ball joints so that the shower baths can be used without wetting the hair. For the boys a shower room is provided with a rain head gang shower and several individual stalls. The hot water supply to the showers is carried thru regulators

so that it is impossible to get water of more than 100 degrees temperature. This water can be tempered down to clear cold water either by an in-

dividual mixing valve in the stalls or by the instructor at the controlling valve in the gang shower room. (Concluded on Page 62)



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(Concluded from Page 60)

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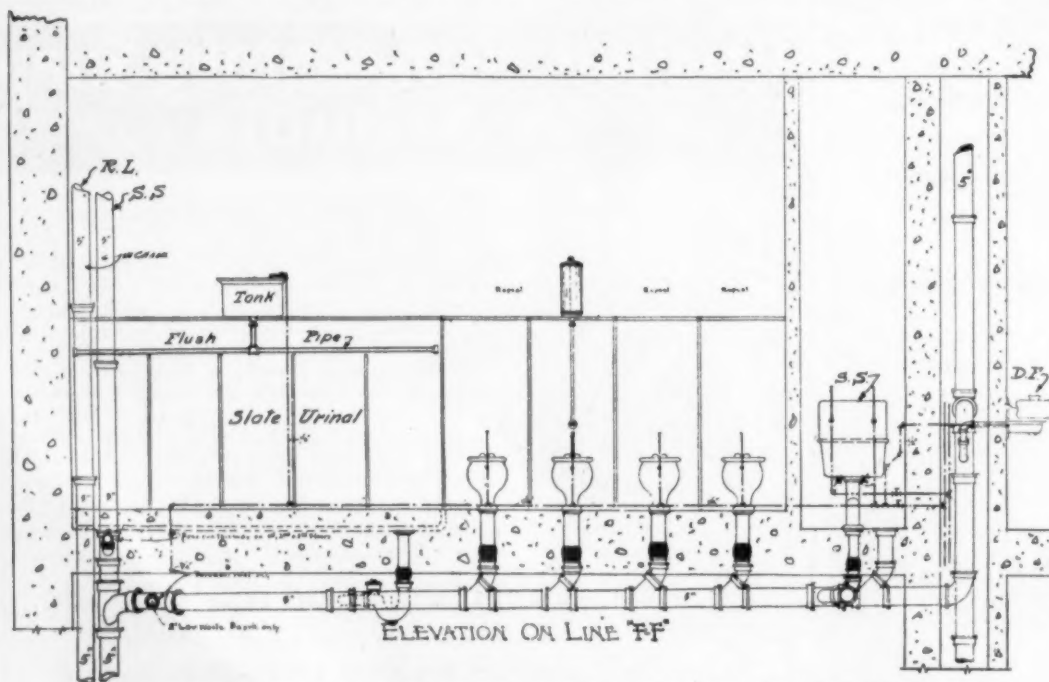
To avoid excessive pressure on the fixtures during fires a pressure reducing valve which will not supply water in excess of 45 lbs. is used.

Fire protection, consisting of fire standpipes with brass angle valves, brass hose racks and 75 feet of 2½ in. linen hose, is installed so that all portions of the building are thoroughly protected.

WHAT WILL THE SCHOOL BOARD DO WITH STAMMERING?

(Continued from Page 30)

class of nervousness; what authority, pinned down, will say that women are immune to nervousness, and nine-tenths more so than men? However, the educator may satisfy himself from any authority that the prohibition of the disorder in infancy is a remedy by asking that authority to put in writing over his signature the statement that it is not. The request will not be granted, it is safe to say. The authority will not, of course, uphold the treatment of stammering in the schools by the regular teachers and by the simple means of hastening the natural outgrowth by forbidding the habit. There are practically no authorities who are not committed to some theory or treatment which they would prefer to maintain or at least not contradict. One notable exception is Dr. Albert Liebmann of Berlin. He has renounced breathing exercises and articulatory exercises and his treatment consists merely of restraining the stammering and encouraging natural speech. In the common schools, in which approximately ten years is available, restraint of the stammering is alone sufficient to bring about the recovery of even violent cases. Of course some co-operation on the part of the stammerer and his parents is necessary, but that is almost inevitable.



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If parents knew what they should, they would stop the disorder so quickly that it would never reach the teacher; but parents are not under authority and they cannot be required to learn or to apply the learning; teachers are under authority, and can be required to do both. They are society's last line of defense against the disorder.

But if the school board cannot obtain direct warrant from the authorities for treating stammering in the schools by the simple expedient of prohibiting it, what defense has it against opposition to that treatment? The school board can say, "After waiting for generations for a solution from the investigators, and after seeing all prospect of a solution disappear under an incomprehensible mass of discussion, we have adopted the simple home remedy proved by wise parents from the time the race began to talk: Cease your opposition until you can show something equally efficacious and equally free from cost, inconvenience, favoritism, and interference with the regular teachers."

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If a present-day superintendent applied his scientific tests to the textbooks of the eighties and early nineties of the last century, it is certain that he could point out many defects. It is not likely, however, that the majority of men and women who constituted the school children of that period would agree with him in his condemnation of books that bring back childhood memories. The editor of the Columbus (O.) Journal expresses rather strongly the love for the old school books:

"We have been looking long for a 'McGuffey's Fifth Reader,' the old textbook we used at school in the sunny days of youth. At last we found one and now it occupies a prominent place in our library. Every page is filled with culture, wisdom and aspiration. It is possible that no one

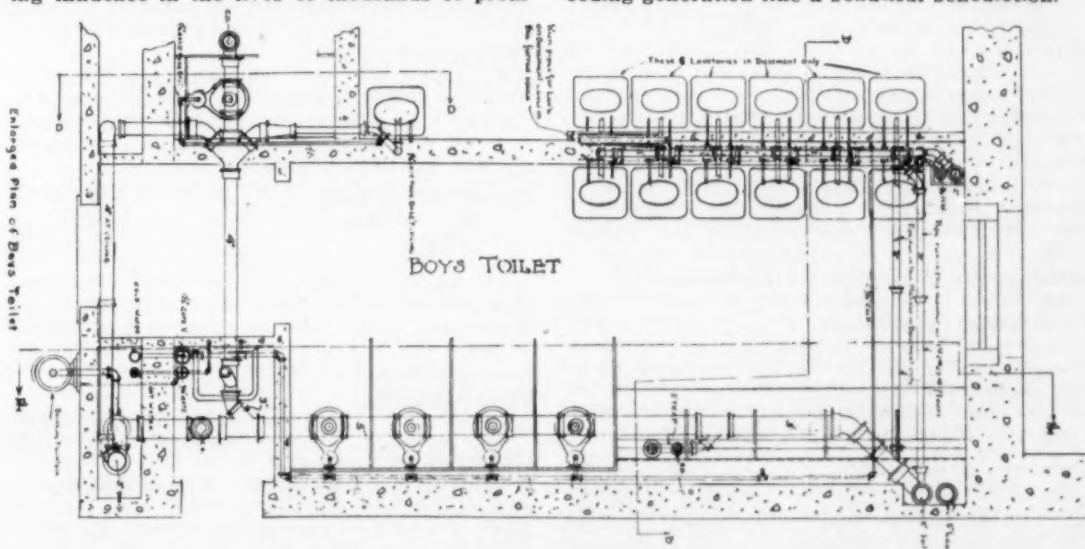
book has made a deeper impression upon the men of 50 or 60 years now living than this old reader. On the trolley, the other day, we happened to quote a piece of a paragraph from it to a friend, when he completed the quotation. Then we essayed a fragment from another paragraph, and he gave the rest. We tried another, same result. Then we discovered that fully three-fourths of his intellectual endowment, like our own, had been furnished by that book.

"Then we recounted the various articles, and nearly all of them had a line or two in our memories. There were Halleck, Willis, Dick, Goldsmith, Percival, Irving, Campbell, Longfellow, Sigourney, Benjamin, Bryant, Cooper, White and that whole galaxy of glories who furnished the thought and aspiration of the past century. There is no school book among all the readers, grammars, arithmetics, geographies, histories, rhetorics, sciences that has done as much good as McGuffey's Fifth Reader. Its lessons are a guiding influence in the lives of thousands of prom-

inent men and women today.

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PLAN OF TYPICAL BOYS' TOILET ROOM, MONTCLAIR HIGH SCHOOL.
(Compare with Cross Section on page 62.)

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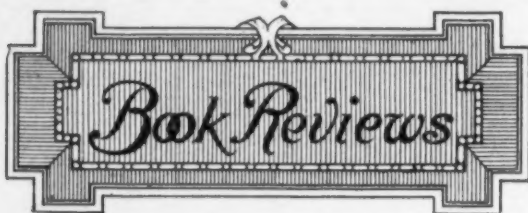
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Health Work in the Public Schools.

By Leonard P. Ayres and May Ayres. 59 pages. The Survey Committee of the Cleveland Foundation, Cleveland, Ohio.

This little volume is one of the series of reports of the Cleveland school survey. It makes clear that the sum of \$36,000 spent for maintaining 86 school dispensaries and clinics and for the salaries of sixteen physicians, an oculist and 27 nurses insures for each child in the schools conditions of health and vitality to take advantage of his educational opportunities.

The report praises the general work of both physicians and nurses and finds much of value in the standardization of work, dental and eye clinics, home followup work, etc. It urges that the department of health be unified and its control centralized under the superintendent of schools. As a picture of a typical American city plan of health control and education, the book deserves wide study. It affords especially a basis for comparison and for progressive planning.

Bibliography of English for Engineers.

By Wilbur O. Sypherd. Cloth, 63 pages. Scott, Foresman & Co., Chicago, Ill.

This very complete bibliography of recent literature on English for Engineers should be in the hands of every teacher of the subject. It will be found valuable also by teachers in technical high schools and trade schools.

Industrial Arts Design.

By William H. Varnum. Boards, 248 pages. Price, \$1.50. Scott, Foresman & Co., Chicago, Ill.

Art teaching in American schools has undergone radical changes since the sensible principle of "art for life's sake" replaced the vague theory

of "art for art's sake." The present book reflects the present tendency of relating art instruction closely to the school shop work.

The author has succeeded splendidly in combining the viewpoint of both art instructor and shop teacher and the theories and rules which he has formulated are all practical and directly usable. They have this splendid characteristic: they apply directly to the processes of working the materials used in school shops and they guard the student against impractical designs which are unfitted to the technique of the crafts. Chapters one to five deal with elementary problems of mass and its divisions and appendages; chapters six to eight discuss contour enrichment and chapters nine to fourteen take up the difficult problems of surface enrichment. The use of color is practically presented in chapters fifteen to seventeen. An appendix suggests a course in applied design for thin metal and clay.

The book is splendidly illustrated and with the exception of overlarge cuts on pages 71, 100 and 109 is itself a model of typographical design.

Graded Writing Books.

By Albert W. Clark. Books I and II. Price, \$1.08 per dozen. Ginn & Co., Boston, Chicago.

This is an abbreviated course of the author's well known texts. The books are intended for the first and second grades.

Outline and Suggestive Methods and Devices on the Teaching of Elementary Arithmetic.

By Franklin P. Hamm. 40 pages. J. B. Lippincott Co., Philadelphia, Pa.

The author presents drill suggestions on those topics in arithmetic which eight years of experience have shown him to be special stumbling blocks. The work is intended for the fifth and sixth grades and is exceedingly useful.

Plane Geometry.

By Fletcher Durell and E. E. Arnold. Cloth, 12mo, 300 pages. Price, 88 cents. Charles E. Merrill Co., New York.

This text commends itself for the omission of unessential propositions and for the improvement in the presentation of difficult geometric methods, such as proof by analysis, etc. The book splendidly offers work which may be completed within a year without omitting important

theorems or offering too small an amount of original exercises. The latter are especially practical and show a thorough understanding of the possibility of making geometry directly applicable to common problems in the industries and business.

The Tragedy of King Lear.

The new Hudson Shakespeare series. Edited and revised by Ebenezer Charlton Black. Introduction and notes by Henry Norman Hudson. 191 pages.

The Tragedy of Macbeth.

159 pages. Price, 30 cents each. Ginn & Company, Boston.

Among the outlines that are so plain, that look so simple, that stand for long, patient work, are the two pages headed, "Distribution of Characters." In this analysis are shown the acts and scenes in which the characters appear, with the number of speeches and the lines given to each.

In the introductions to "King Lear" and "Macbeth" fact upon fact sustain the opinion that the tragedy of a broken home, the lengths to which a strong temptation may lead man or woman have long been themes in the stories and songs of all ages and countries. It is much to learn the sources of the power portrayed in these great plays. Lovers of Shakespeare's plays when put upon the stage will linger over the pages given to "Stage History." The list of famous actors is a long one. These men and women have been worthy interpreters of the great characters in these tragedies.

English for Business.

By Edward Harlan Webster. 440 pages. New-son & Company, New York.

A limited topic may be approached and handled in a large way. If its relations to the larger topic are kept in mind, the development will be harmonious.

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are constantly related to the composition principles developed in Part I." The chapter on "Word Study" contains excellent directions for gaining an accurate and broad vocabulary. A list of words frequently misspelled, another of words used in business, merit close study. Much attention is naturally given to advertisements and to letter-writing. Ability to write a clear, telling advertisement is always in demand. Read a few letters from large business houses. The points selected, the choice of words, the courteous phrasing form a finished letter, the result of training and experience. A good business letter is artistic. The exercises are many and varied. Hardly a detail seems to have been omitted. The drill should give good results, for English and for business.

First Year Mathematics.

By George W. Evans and John A. Marsh. 12mo. 353 pages. Price, 90 cents. Charles E. Merrill Company, New York and Chicago.

A master and headmaster of high schools in Boston have in this book expressed "the result of twenty years of patient experiment in actual teaching." The book has been used in manuscript for four years, in one of the largest high schools in Boston and has been found workable. It is especially designed for the greatest good of the greatest number—pupils who can have but one year of mathematics. In short it is in the interests of greater efficiency.

The unusual arrangement of topics should be noticed. In the first third of the book measurements of lines, angles, figures are used in algebraic work. Later in the book more algebraic work is used in connection with a number of the more important propositions in geometry. Some acquaintance with this highly practical subject is thus obtained. Simple terms instead of technical terms are used in working with equations; useful graphs are found; pupils are required to check their work; these and other points mark this departure from the routine textbook.

The Story Primer.

By Nettie L. Ferrell-Puckett, illustrated by D. R. Augsburg. 112 pages. Educational Publishing Company, New York, N. Y.

Stories in pictures, stories in words for little

tots to read and enjoy. The words of one syllable, are in large, plain print. The pictures, skillfully drawn in black and white, make one wish there were still more pictures in black and white.

Child Accounting in the Public Schools.

By Leonard P. Ayres. 68 pages. The Survey Committee of the Cleveland Foundation, Cleveland, Ohio.

In this section of the report of the educational survey in Cleveland in 1915 the good and the poor features of "Child Accounting in the 'Public Schools'" of that city are summarized.

According to evidence taken from the United States census, the Cleveland school census has seriously fallen short of enumerating all the children of school age and the returns have not been so tabulated as to give essential facts. Since the city receives from the state about \$2.00 for each child enumerated, complete accuracy would increase its income much in excess of the salary needed for a thoroly competent census-clerk. Then the prescribed methods of counting attendance do not show the real facts. Among the good features it is noted that the percentage of over-age children in the elementary grades is lower than in most cities and that a creditable proportion of its pupils finish the eighth grade, enter the high school, and then finish that course.

These with other valuable findings and suggestions make this section highly useful to the city of Cleveland and highly suggestive to other cities since accurate municipal bookkeeping not only shows existing conditions but also shows where improvements are greatly needed.

Latin Plays for Student Performances and Reading.

By John J. Schlicher. 12mo. Cloth, 213 pages. Price, 75 cents. Ginn & Company, Boston.

At a first glance the short sentences and conversational style found in these seven plays seems almost unnatural. One drilled in the military reports of Caesar, in the concise sentences of Tacitus in the orotund paragraphs of Cicero may ask, "Is this Latin?" However, a recollection of delightfully chatty letters, written when the Latin language was at its best, proves this cursory glance to be misleading.

The simple, idiomatic style is not too difficult

for pupils in the early stages of Latin study. These plays are planned for performances in high schools and for rapid oral reading. A vocabulary, brief notes, full stage directions give sufficient help. The haps and mishaps of a group of boys and girls in "The Sack of Apples" are full of humor; the despair of the Helvetians over their enforced departure from their native land is mournful in the extreme. The plot of the other plays centers around historical or mythological personages.

Physiology and Health.

Book One. By Herbert W. Conn. 224 pages. Price, 40 cents.

Physiology and Health.

Book Two. By Herbert W. Conn. 382 pages. Price, 66 cents. Silver, Burdett & Company, Boston, New York, Chicago.

Boys and girls in the lower grammar grades will have a good time studying Book One, in which physiology is not put completely into the background, but is made a part of the more important topic, health. These children may not be able to give expert criticism on style but they will be certain vital facts are told in a way they can first understand and then remember. They will more than like the instructive illustrations and the printed questions at the end of each chapter. The terse definitions and the marked pronunciation found in the glossary will remove more than one uncertainty. Lessons in personal hygiene will develop a sense of responsibility toward community hygiene.

In Book Two the author has tried to retain the essentials of physiology and to place at the same time a large emphasis upon public and private hygiene. The values of different foods and the different values of proteins from different sources, the purification of water, the grading of milk, are instances of the topics which have been treated from the standpoint of recent investigations. The work of the many tiny nerves, those controllers of all bodily actions—is really fascinating.

A folder mentions that the author has for more than ten years been director of the state health laboratory of Connecticut and that last May Indiana adopted this series for its exclusive use for a period of five years.

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A Student's History of Education.

By Frank P. Graves. 453 pages. Macmillan Co., New York.

An exceedingly comprehensive textbook, for its size. The author's understanding of scholastic philosophy is somewhat defective and his emphasis upon some present day movements in education appears out of proportion to their ultimate value.

The Ideal Catholic Readers.

Third Reader. By a Sister of St. Joseph. 247 pages. Price, 40 cents. The Macmillan Company, New York.

The suggestions for teaching these stories and poems are practical and should help pupils to catch the motive of each selection. Those relating to the poems have some special points of excellence. The accounts of child saints and the simplified Bible stories give a fine religious tone. Indeed, the entire contents are varied and choice and will arouse the higher qualities of mind and heart.

PUBLICATIONS RECEIVED.

Carnegie Foundation Report for 1915. The tenth annual report of the president and treasurer of the Carnegie Foundation for the Advancement of Teaching. The report contains in addition to the usual statistics and financial reports, a discussion of the educational inquiries

carried on by the Foundation, and a summary of recent progress in pensioning teachers. A valuable tabular statement of pension systems for public school teachers is included.

A Guide to Better Schools. By E. A. Duke. Issued by the Oklahoma State Department of Public Instruction. This comprehensive pamphlet covers the design and construction of rural schools, rural school sanitation, the standardization of rural schools, teachers' homes, consolidation of schools, social center activities in the country, night schools, school libraries, agricultural instruction. It will be found valuable for rural supervisors and teachers.

Lecture Notes for Canning Charts. Prepared by Grace M. Smith. Published by the International Harvester Co., Harvester Building, Chicago. The pamphlet discusses the purpose of canning, the steps in cold pack canning, the facilities needed, sealing tin cans, processing products in tin, the use of fruit syrups. There are lists of charts and slides, educational booklets and a time table.

A Report of the Use of the Courtis Standard Research Tests in Arithmetic in Twenty-four Cities. By Walter S. Monroe, Kansas State Normal School, Emporia, Kans. Published by the State Printer, Topeka, Kans. The pamphlet is the fourth of a series of studies made by the Bureau of Measurements and Standards of the

Department of School Administration of the Normal School. It deals principally with four topics, The Tests and Tabulation of Scores; The Standards, or the Score Which Pupils Should Make; The Interpretation of City Distributions and Medians; The Use of Individual Scores.

A Gary School's Success in New York City. A report by Associate Superintendent McAndrew upon the work of Public School 89, Brooklyn, operated on the Gary plan. Bulletin No. 28, March, 1916. Published by the Public Education Association of New York City.

School Architecture. Paper, 45 pages. Issued by J. A. Churchill, state superintendent of instruction. Contains sketch plans for three series of one-, two-, three- and four-room country schools, general specification outlines and other information.

School Credit for Home Practice in Agriculture. By F. E. Heald. Bulletin 385. United States Department of Agriculture. This bulletin is intended to assist superintendents and country school teachers to give school credit for home work in agriculture. The pamphlet is made especially valuable by a collection of tables showing the amount of labor required in different sections of the country in handling different crops. These tables make it especially easy to evaluate children's work in different parts of the country.

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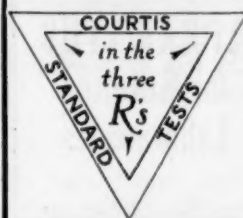
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AMONG BOARDS OF EDUCATION.

(Concluded from Page 47)

lution barring from school attendance, any non-resident pupil who does not furnish the superintendent with a signed letter of authority for the payment of his tuition by parent, guardian or school board of the home town. The clerk of the board is given authority to notify the parent or school board in case a pupil fails to give the required information.

Oklahoma City, Okla. Rev. E. T. Lane has been elected president of the board to succeed R. J. Edwards.

Canton, O. Preliminary plans have been begun for the proposed survey of the schools. The work is to be done under the auspices of the local Chamber of Commerce.

The school board of Macomb, Ill. has introduced departmental teaching in the fourth to the eighth grades of two schools. It was originally planned to combine these grades in one building but the objections of parents made it necessary to use the two buildings.

Akron, O. Classes in three elementary schools are operated in double shifts to accommodate the pupils who have enrolled.

North Brookfield, Mass. The board has ruled that children who will be 5½ years old in October, may be enrolled in the first grade. Formerly all primary pupils were required to be 5½ years old before the opening of the school term.

Montgomery, Ala. The board has adopted a resolution providing that tuition shall be charged in the schools. The tuition charges range from \$0.75 to \$2 per term.

Milwaukee, Wis. The board has adopted the departmental plan of teaching in three schools as the result of the successful trial of it in the Ring Street School. The two additions are the Twenty-seventh Street School and the Junior High of the Knapp Street School. The principals of the respective schools are given the right to use their discretion in the use of the plan.

St. Paul, Minn. A new method of school supervision has been put into execution in the schools. The program which is in line with the new policy, provides for supervisors in all departments, who are to carry on frequent consultations with the

instructors relative to the subjects taught. Formerly only such special subjects as penmanship, music, art, manual training and domestic science have been under the direction of supervisors.

Ishpeming, Mich. A system of bookkeeping, permitting the classification of all accounts, has been adopted by the board.

Milwaukee, Wis. The board has adopted a recommendation of the building committee providing that school buildings shall be opened for political purposes during the fall election campaign.

Columbus, O. The board has adopted a revised course of study for the public schools. The new course which is the result of two years' study, is adapted to the junior high school plan, provides for correlation of studies and a flexible program suited to the needs of each pupil. The course has been approved by the supervisors of the grade and high schools, and by former Supt. J. A. Shawan.

Manchester, N. H. The board has adopted a policy by which the superintendent of schools, H. F. Taylor, is given free rein in the appointment of teachers and in the disposition of matters heretofore settled by the board. In the opinion of the members, it was advisable that the position of the board be defined, and that the superintendent be given full control in school matters with power to handle the general administration, appoint teachers, adopt textbooks and carry on the work of the schools.

Portland, Ore. The board of education has suspended its fixed policy of requiring contractors in school construction work to hire local labor only. In making contracts for a new high school building, the Benson Polytechnic High School, the board was confronted with the request on the part of Mr. Benson, the donor of the funds with which the structure is being erected, that the labor be obtained in the open market. The local labor council protested but the board held that the contractors should obtain workmen wherever they could.

The Chicago board of education, at its final meeting before the opening of schools, refused to reinstate the 67 teachers who had been discharged in June. The three district superintend-

ents in the list have been given grade principalships. It is declared that the teachers' federation will begin suits for the reinstatement of all the discharged teachers.

New Orleans, La. The financial condition of the school district has caused the board of education to suspend the free textbooks in the evening high schools. Students will purchase books from the school and the proceeds will be applied to the payment of running expenses.

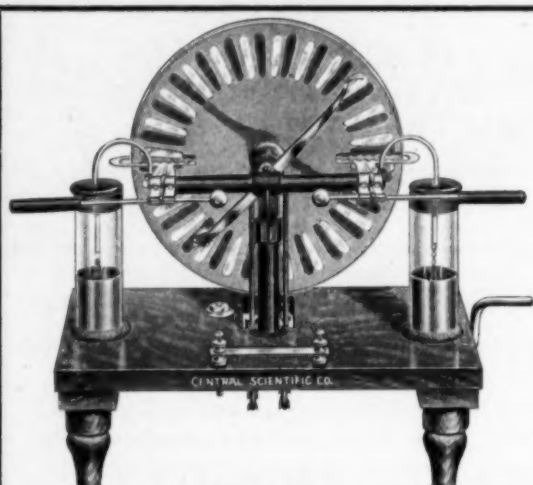
The Cincinnati board of education has assumed supervisory control over all moneys collected and disbursed by teachers in behalf of the schools or of any department of the schools. Upon recommendation of Supt. R. J. Condon a uniform system of accounting has been devised. Teachers must follow this system and must submit their accounts to an annual audit by a representative of the board. In his recommendation Mr. Condon wrote:

"While these school funds are not controlled directly by the board of education, and as such are not public funds in the sense that they are derived from local or state taxes, yet in another sense they represent public funds collected and controlled by public officials, teachers and principals, who are responsible for their custody.

"To more fully protect the teachers and principals, as well as to safeguard the funds, I believe the board of education should assume such supervisory control as I have suggested."

Cleveland, O. A general shakeup in school principalships has been effected with the transfer of 22 grade school principals and the appointment of fifteen new ones. The changes were the result of a ruling barring the reappointment of teachers of 70 years and over, and those of 65 or over, without the sanction of the board. Of the fifteen new principals, ten have been assigned to grade schools. Five women principals have been transferred to make room for men principals in five of the six new junior high schools.

The Northeastern division of the Illinois State Teachers' Association has secured Mr. Dwight H. Perkins as a speaker for its School Board Section. Mrs. A. E. Walker of Hinsdale will act as chairman of the section.



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(Concluded from Page 26)

of recording the expenditures for this purpose were uniform.

The greatest value of this system lies in its uniformity. It has been definitely agreed what shall constitute an expense for maintenance, an expense for capital outlay or an expense for operation. It has also been definitely determined what articles shall be classified as supplies and what as equipment. There is much difference of opinion among our best accountants as to the articles that should go in these lists, but it does not matter so much whether a stepladder should be classified under janitor's supplies or under building equipment so long as everybody classifies it in the same way; so while there may be objections to some of the classifications contained in these schedules the important thing to know is that the classification is uniform and that everybody is recording expenditures for a particular purpose in the same place and under the same head. The book of

instructions which has been compiled for use in New York State gives minute directions as to just what must be included on each schedule and in each column. If these directions are carefully followed the reporting of school expenditures will be uniform.

This system is not intended to be a complete accounting system. It is intended to be only a uniform method of recording and reporting school expenditures. Any accounting system leads up to this goal and the schedules here used in classifying the expenditures will fit in with any accounting system. The purpose of inaugurating this system in the State of New York is to direct the fiscal officers of the state in recording their expenditures so that at the close of the year the reports from the different cities and school systems will be absolutely on the same bases thruout, so that just comparisons can be made of the economy with which the schools are being conducted in the different communities and so that the Department can determine what is a reasonable and just cost for any of the separate activities relating to the school system. The recording and reporting of

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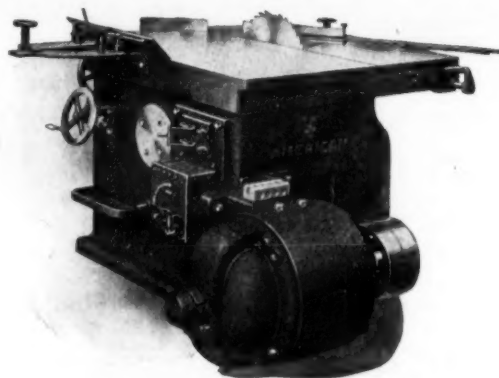
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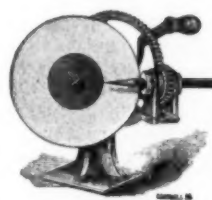
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school expenditures as here outlined, however, will not have accomplished its greatest purpose if the matter is dropped at this point. It then remains for the statistician to take these reports and draw from them deductions and comparisons that will be of value in school administration. A uniform unit basis must be determined and agreed upon for construction work, for operation of plant, for instructional service, etc.; the expenditures for these different activities that will admit of comparison on a unit basis should be reduced to that basis. It should be determined into how many groups school systems should be divided for the purpose of comparison and the size of the systems that should go in each group. These details are to be worked out during the year and it is expected that the financial report submitted by the State of New York in 1917 will be of real value to schoolmen.

HIGH SCHOOL ARCHITECTURE.

(Continued from Page 33)

school opportunities prohibitive. The two good reasons for a site outside the center of the district (besides the one mentioned above) are: (1) A larger site for the funds available; and (2)



Side View of Top Case showing Auxiliary Latch.

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More favorable conditions for fostering a higher type of school spirit (a community spirit) than obtain in the heart of a city or town. Then, too, it properly handled, the outside site can often be secured free from enterprising land owners who are willing to contribute a bonus for bringing improvements their way. This, however, must be handled with great care; it is full of peril.

The final location of the school should be left to the board and not submitted to a vote of the people. The law should be so amended that the board of trustees shall have jurisdiction over the selection of the site.

The Building.

There is a strong tendency toward the one-story, unit-plan type of building for the regular classrooms, with two-story administration sections. Basements are eliminated except for the heating and ventilating apparatus. The general plan is to arrange the units around a quadrangular court, opening back from a solid front which contains the administration department. The conventional hallways are eliminated and covered porches of much lighter construction substituted. These porches are from ten to sixteen feet wide and extend the length of the series of classrooms, which open directly on them. So far as we know, California is the pioneer in this type for the high school.

Four years ago one of the most prominent and successful architects in the state drew the plans and superintended the construction of a well-known high school of the conventional type. This building, of excellent construction and up-to-date at the time of its completion, cost approximately \$125,000. Six months ago this man drew the plans and specifications for a high school on the unit plan containing five more

classrooms than the former, and estimated that it could be built for the same money, the material used being the same kind. He also estimated that the heating and ventilating systems and the cost of operation would not be any more in the unit plan building than in the two-story and basement building.

The Materials.

One of the serious questions entering into the the cost of a building is the kind of materials to be used. The day of the wooden high school we hope has passed in California. Boards of education, in asking for bonds running thirty and forty years, are expected to provide a building that will outlast the bond issue. Such a demand necessitates the use of substantial material. Your committee having interviewed most of the leading school architects in the state during the past two years, and also some of the most successful contractors and builders, begs to report that the cheapest durable material that we have found is hollow tile. The manager of a new plant, projected on a large scale, now opening up near Modesto, has quoted to our board tile at a figure that would put both brick and concrete out of competition. To compete with the price named brick would have to be bought at \$5.50 per thousand—just one-half their market value at this time.

The tile can be used for a finishing surface if desired, just as brick, or for a plaster or brick veneer surface, if preferred.

The Funds.

This brings us to the third main head—*sine qua non*—the place where the whole fabric fails in so many instances, and the board and faculty go on year after year under increasing handicaps and also increasing demands, a double hardship and injustice.



A school bond election campaign always means strenuous work for some one if the bonds have any chance of carrying. The principal or superintendent must expect to take the laboring oar, and the faculty should be among the crew. The consensus of testimony goes to show that a whirlwind campaign is most successful. This must be preceded by a thoro organization under the direction of the board and superintendent or principal. The support of the newspapers must be secured and competent persons detailed to each to prepare daily short, crisp, telling articles. Such articles should be written with reference to a climax the day before the election, and nothing should be allowed to divert the line of argument laid out. Representative officials of the civic organizations should be interested in committee work. If wisely directed the student body will prove invaluable help; not thru torch-light processions, parades, etc., but thru the systematic canvassing which they can do better than any one else.

FINANCIAL PRACTICES IN CITIES AND TOWNS BELOW TWENTY-FIVE THOUSAND.

(Continued from Page 20)

with the facts. Superintendent E. W. Robinson, above quoted, states: "A third factor which contributes in no small degree to possibilities of material and educational loss, is the often lax and unbusinesslike methods of school management by both school committeemen and school superintendents, due in part to the fact that neither set of officials secured their positions as a result of procuring any evidence that they possessed even fair business ability. Politics and pedagogy are not closely associated in the common mind with practical business ability

*American School Board Journal, December, 1915, p. 14.

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and the power of expending public money economically and wisely. . . . It is generally assumed that the educational department of any community, besides being its most expensive utility, is also its least efficiently managed one, a belief due in part to the absence of any proven business ability of either committeemen or superintendents at the time of their election or appointment, and in part to the often proven inability of both to spend what money is allowed them, wisely, or to keep within the annual appropriation called for by them."

The reasons for this lack of business ability on the part of those responsible for the business management of our school systems are not hard to locate. Superintendent Robinson puts his finger on at least two prominent ones: We do not demand any evidences of proven business ability in the men in whose hands we place this big responsibility, and secondly, neither politics nor pedagogy are usually very closely associated with this particular kind of ability. This means only that we must eliminate politics, and not expect the expert in pedagogy to be an expert in finance. It does appear however, that common sense and pedagogy ought to work together, and common sense is about all that is necessary to handle the general run of financial problems. There is no great mystery about efficient book-keeping. It ought not to require technical training to establish the fact that we must not spend more than we have. A third reason for this lack of business ability is that the typical school man has rarely had any business experience, and if so, seldom in other than a small way. He thinks in small amounts and in the present time. This is all too often true of boards of education.

The field of education does not attract men of any proven business ability, and is not likely to, due to the fact that "education" and "business" are two very distinct things, dependent for success on fundamentally different factors. A fourth reason is that many of our American superintendents are young men, just out of normal school or college, and therefore inexperienced in both business and education. A fifth reason is very well developed by Dr. Cubberley in his new book on "School Administration."⁹ It is a fact that the school man is the least able to make his case before the city council in competition with the heads of the other city departments. His case is harder to make than theirs. His terms are less well understood and he deals heavier in futures. It cannot be denied, however, that he is often but poorly prepared to present his case. He hasn't the data at hand, and in shape to present in an effective and striking manner. He simply has not worked on the job. This is easily apparent by comparison. He reveals the fact that he does not know where he is, what he has done with the money previously granted him, nor what he will do with the additional amount, if secured. Dr. Cubberley writes:¹⁰ "The school department also asks yearly for more money, largely on the basis of good intentions and purposes, but without being able clearly to prove its needs. When an attempt is made to do so, it not infrequently is made in terms which the ordinary citizen can scarcely comprehend. In part this condition is inevitable, by reason of the nature of the school. Often, however, the school department presents

⁹E. P. Cubberley: Public School Administration, p. 414.
¹⁰Ibid.

no budget worthy of the name, and no statement that shows that it knows anything as to the unit costs of its work, or the need for or the effectiveness of expenditures within the school department. It is really not surprising that city councils often emphasize other city departments and give the schools a decreasing percentage of the annual city taxes.

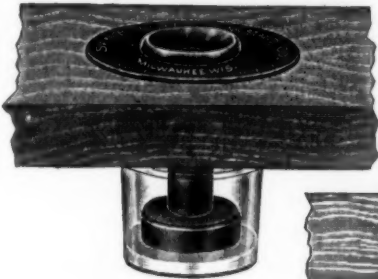
This last reason means that the school man of today must know his job as other city experts know theirs. He is going to be forced to prove his case from now on. He will no longer be taken on faith. He asks too much when he complains at this demand.

To conclude our introduction: No standards exist in comparable terms for the men in the smaller cities and towns. They haven't any relevant data, from the standpoint of either magnitude or terms used. They have duties so manifold that they have neither the time nor the energy to compile the same. They are accordingly forced to rely on the expensive "trial and error" method. Without doubt here lies the weakest point in our present educational structure. It was this fact that prompted our department of education to set about collecting suggestive material bearing on financial practices for dissemination among the school men of Kentucky. We have had in mind more particularly serving superintendents and board members in towns below 5,000. Here the need is most urgent. We have included a small amount of illustrative material from two or more big cities for the purpose of proving the point that certain practices are not impossible, even for systems of great magnitude.

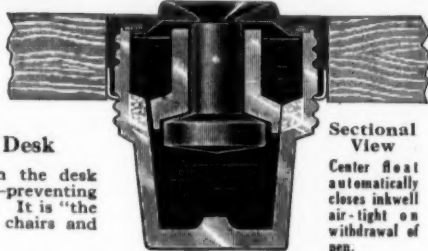
(To be continued.)

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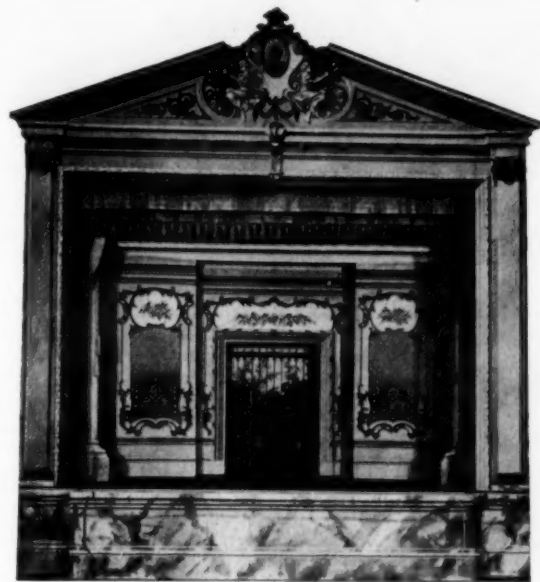
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CHICAGO

A HIGH SCHOOL DAY OF SIX HOURS AND DIRECTED STUDY.

(Concluded from Page 23)

and determines the work of the whole class. If it is made improperly, it may waste considerable time of every member of the class.

About three months later at the close of the school year, a petition requesting the return of the short school day was presented to the superintendent and the school board. The school board carefully considered it and decided unanimously that there are no good reasons for a return to the short school day. The petitioners, the high school teachers, could not say that the work of the students was less efficient than under the traditional plan. This, in effect, was an admission in favor of the new plan because the school work was largely performed in school and the night work of the home largely eliminated.

In the last analysis results prove or disprove the value of the plan. Recently a comparison was made of the per cent of failures under the new plan with the per cent of failures under the old plan. In order to secure the greatest possible validity in the results only the records of teachers who taught under both the old and new plans were examined. More than 3,000 grades were compared with the promotion records of February, 1915, and of June, 1915, and from the promotion records of June, 1912, and of February, 1913. The results showed that the per cent of failures in 1915 was only 49.5 per cent as great as in June, 1912, and February, 1913, under the old plan.

It was also noted that the number of minimum passing grades was reduced and the number of grades B and A was increased under the new plan. The school discipline has become less of a problem probably because the students are acquiring the habit of study, possibly because

a half-hour of study followed by a half-hour of recitation reduces the fatigue incident to the monotonous single type of work under the old plan and thus eliminates irritability of temper in both students and teachers. The attitude of the parents, citizens, and students towards directed study and the long school day is favorable. Individual teachers of the high school have expressed their belief in the soundness of the plan. Not a single teacher has voluntarily withdrawn from the school system except for a substantial increase in salary.

Time is an essential element in education as well as in labor and business. Never before was time so important a factor in high school education as now. Laboratory courses have become a prominent part of all high school curricula and require special equipment and much time. The natural and physical sciences, domestic science and art, bookkeeping, typewriting, manual training, and shopwork are subjects which cannot be pursued adequately at home nor can they be pursued with any degree of thoroughness in school when the school day is short. The paramount concern of vocational education is a longer school day notwithstanding that it is the exception to find this subject on the programs of educational meetings. To pass laws providing for vocational training without establishing a longer school-day is legislative short-sightedness. To build and equip a high school for a quarter or a half a million dollars or more at public expense and dismiss the students at 2:15 o'clock in the afternoon or earlier and require them to do their studying at home is a pedagogic error, an economic waste, and a monument to an inefficient school administration.

I have always maintained that the child entering school at six should have a shorter school

day than the boy or girl of thirteen in the eighth grade, and the eighth grade should have a shorter school day than the high school. This is the case in the system of schools which I represent. The beginners have a school day half as long as those in the eighth grade and the school day of the eighth grade is an hour less than that of the high school.

Recently I collected data concerning the length of the school-day of the elementary schools and of the high schools of 25 leading cities of the United States. In most of the cities the child of six years has a school day as long or longer than the student of the high school. In Philadelphia, for example, the elementary schools have a school day of five hours and the high school day is fifteen minutes shorter. In Milwaukee the elementary school day consists of five hours and the high school day is twenty minutes shorter. New York City maintains an elementary school day of five hours and a high school day of five and a quarter hours. A few cities have adopted a longer high school day among which are Louisville and Indianapolis with a high school day of five minutes less than six hours, Chicago with a high school day of six hours, the technical and commercial high schools of Cleveland with a school day of six and a quarter hours, the mechanic arts high school of Boston with a school day of seven hours, and the two-year vocational school of St. Louis with a school day of seven and one-half hours.

However, these statistics are not intended for the purpose of proving or disproving the norm of the high school day. Consensus of practice does not stimulate progress. The progress of each age had its inception with a few original thinkers such as Fulton, Whitney, Morse, Edi-



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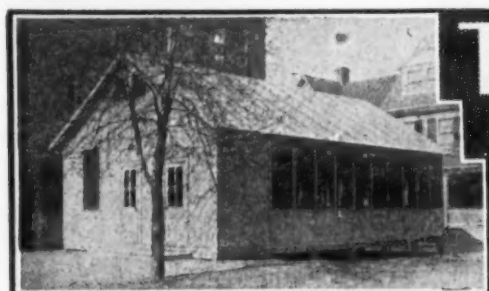
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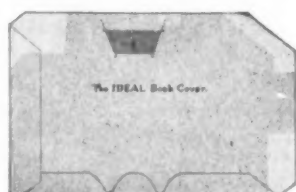
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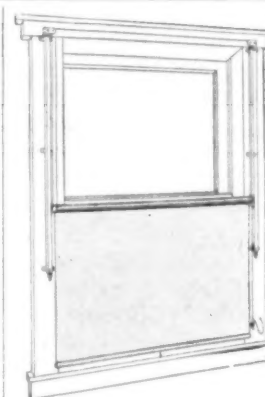
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son, Marconi, and Wright. The crowd first called them fools and afterward accepted their standards. Those who collect statistics for the purpose of proving their position on any question by the support of a consensus of opinion are by nature and act static. Change is as surely the law of progress as it is the law of growth.

The Pennsylvania child-labor law permits the employer to demand nine hours of labor a day of children between the ages of fourteen and sixteen. These children are, as a rule, not so well fed, clothed and housed as are the more fortunate high school students of the ages of fourteen to eighteen. Notwithstanding the high school student's favorable environments, his day of directed labor is seldom more than half so long as that of a child laborer. The educational provision of the same act establishes in many cities a school day of eight hours for the children engaged in child labor. A representative body of Pennsylvania says that a child who works five days a week may profitably attend school on the sixth during eight hours. It will be interesting to note what influence this eight-hour day will have on the school day of the high

schools which now maintain their schools four or five hours a day.

Truly the length of the high school day and the nature of the work deserves the same attention of school boards and citizens whose interests lie with the welfare of the student rather than with the high school instructor.

HIGH SCHOOL ADMINISTRATION.

Milford, N. H. The board has added domestic arts for girl students and mechanic arts for boy students.

Monroe, Mich. A complete course in stenography and bookkeeping has been added in the high school.

Ronan, Mont. The six-and-six plan has been adopted. Two of the elementary grades have been transferred to the high school, making both the elementary schools and high school six-year schools.

Kenosha, Wis. Junior High Schools have been established in the Lincoln and Frank Schools.

Freeport, Ill. The board has adopted a longer school day for the high school. Sessions begin at 8:30 in the morning and close at 4:05 or 4:35 in the afternoon.

Randolph Center, Vt. A Junior High School has been established.

Nashville, Tenn. The Davidson County Board has abandoned the proposal for a central high

school. The former junior high school system has been readopted for the ensuing year.

Wichita, Kans. Beginning September first, the high school was reorganized with four periods of ninety minutes each. The new arrangement provides for 45 minutes for recitation, forty for study and five for the passing of classes. Each subject will have three recitation hours a day and one study hour, each of ninety minutes. A rotary recitation period occurring at a different hour on various days, will be in operation. The school sessions begin at 8:25 in the morning and close at 3:00 in the afternoon.

Pekin, Ill. A Junior High School has been organized. The school day consists of six periods of twenty minutes each. Sessions start at 8:30 in the morning and close at 4:00 in the afternoon.

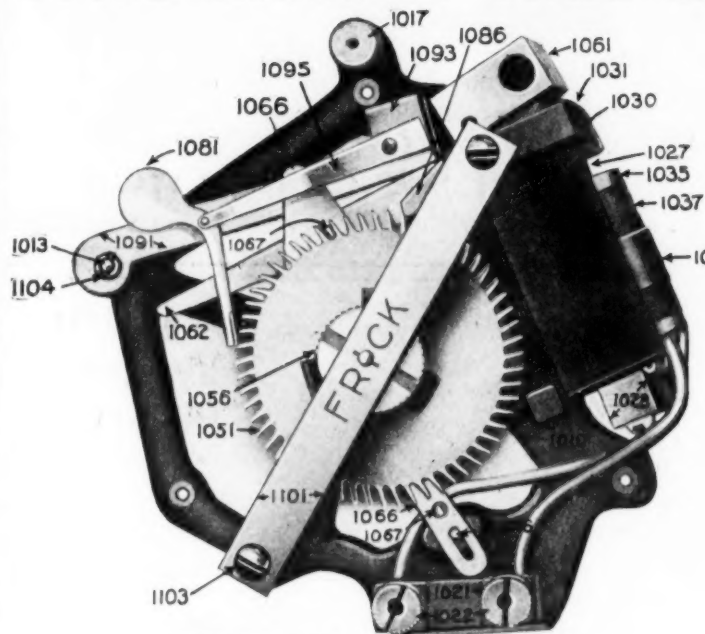
Schuyler, Neb. A Junior High School has been organized in the old high school building. The Senior High School, in September, occupied its new building.

East Grand Forks, Minn. A Junior High School has been organized under the direction of Supt. F. E. Lurton. Full time will be given to manual training, sewing and cooking. Some attention will also be given to literary work and to athletics.

Palmyra, N. J. The board has raised the tuition for non-resident students from \$30 to \$35 per year.

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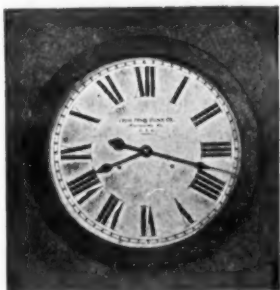
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Style 1S



Style 2

A SURVEY FROM WITHIN.

(Concluded from Page 16)

An interesting example of the latter sort of survey was carried on in Boston under the leadership of Supt. F. B. Dyer and Dr. F. W. Ballou, director of educational measurement. This survey had as its object the revision of the elementary course of study. It was not carried out exactly as outlined above, but the general principles were the same. There was a separate committee for each subject in each grade. The chairmen of the committees from different grades on each subject formed a committee of the whole for that subject, and the superintendent and director kept in close touch with these subject committees. This ensured continuity and correct division of work thru the grades, and a proper balance between minimum essentials and maximum possibilities in every subject. The work was practically all done in after-school and Saturday meetings of the committees, and the resulting courses of study are very thorough and represent the ideas of those who must do the teaching under them.

So far as we know, this kind of a survey from within has not yet been tried on any large scale, so as to embrace all elements in a large system. It is hoped that it will soon be so tried, and the results compared with similar surveys made by outside paid experts.

An interesting possibility is the inauguration of a continuous survey based on this plan. Under this plan, a new survey commission would be appointed annually or biennially, acting as an advisory body to the school board, and keeping the system constantly under the scrutiny of systematic, sympathetic, efficient, and responsible examiners. They would be interested rather than disinterested, but their interest would be sincere and unselfish, and their aim would be

constructive and progressive, for the success of the system would react directly on their own reputations and on the appreciation of the general public and the school board, all of which would be for their own advantage, not only in a professional way, but financially as well. For the strongest lever to pry a salary increase out of a reluctant taxpayer is the evidence of increased efficiency or work better done.

THE HIGH SCHOOL PRINCIPAL.

(Continued from Page 18)

manners and conduct, will take manners and conduct out of the region of mere externals and reveal their intrinsic charm and value; or the expressive reading of a piece of inspiring verse or uplifting prose will tend to purify the imagination, refine the taste, and stir the heart to noble and generous impulse." These are not idle words. Often a mere word, a manner of doing something, a chance suggestion, profoundly affects the life of a boy or girl.

Within the school, then, the principal nourishes the moral and spiritual life of the pupils. He finds opportunities, too, to set this boy on the road to becoming a printer, this one to be an artist, this one an architect, this boy or girl to go to college, and so on. In doing this the principal not only is helping the individual pupils, but he is also rendering service of the finest sort to the community, to the state.

Outside of the school. Outside of the school there are two instrumentalities by which the principal can serve the community. These are his own home, and active affiliation in church work and in the affairs of commercial and civic associations.

In and from his home the principal can serve the community. His home should be an artistic

¹Ibid.
²Letter, Nov. 9, 1915.

and a social center. When it comes to taste in adornment of their home, the principal would be quite helpless without his wife. The words of a friend who wrote of a visit to a college professor's home will give a touch of reality to this idea: "They have a very pretty home—beautiful antique furniture and thousands of books. They have bookcases in hall, parlor, and livingroom. The walls of the latter are practically lined with books. . . . Mrs. H— teaches French in the High School. . . . Her husband teaches German in [the college]. . . . They have a son in my freshman classes. . . . They have beautiful pictures in their home" So, the principal's home should be artistic, an inspiration for other homes. Artistic does not mean artistic at great expense.

To his home as the center of a healthy social life, the principal should, as often as may be, call his teachers. Such occasions could combine business with relaxation. A half hour could be spent in the official teacher's meeting—and afterwards, the informal entertainments.

To his home, as often as may be, the principal should invite groups of parents. His home should be open always to pupils and parents. Of course, the extent to which he can go in this respect will depend somewhat upon the number of dollars in his pay envelop, but the value of such social intercourse cannot be estimated in dollars and cents.

It is safe to assume that there will be moving-picture theaters in the community. The principal should work untiringly to maintain a public demand for the best films and the best plays. He should exert his influence to see that the demand is met by the managers.

Finally, by active affiliation in the work of some church, the principal's opportunity as guide for the boys and girls will be greatly in-



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creased. If, by the possession of sound business sense, he can win the confidence of local businessmen, the principal will secure for the high school an asset of great practical value. The willing co-operation of local merchants often aids the school materially, and has a good effect all around. The principal should be active in civic affairs, showing himself thoroly familiar with the workings of government.

It will be seen from this discussion that the office of principal of an American high school is not one easy to administer. The principal must have a deep insight into the human heart, be wise, "a man among boys and a boy among men," everywhere a gentleman, a scholar, and a man of God.

A BIT OF FEMININE SUBJECTIVE.

(Concluded from Page 22)

One of these things happened: He failed to appreciate his malted milk; he felt the feminine telepathy of the atmosphere, or he suddenly received an inheritance.

Another unfortunate rib had the following experience: She assisted a high school man who had a salary of twenty-five hundred dollars a year but was found incompetent and was dismissed during his contract time; immediately this woman was given his place at two thousand dollars a year and her work proved so satisfactory, that she was re-engaged at two thousand dollars a year. Then the board suggested that

as no other woman teacher on the force received more than eight hundred dollars a year, she be re-elected at a salary of twelve hundred a year. She refused and so the board hired a man at twenty-five hundred dollars a year.

These are only two of many similar examples. If men were receiving lower salaries than women, I should argue for men. The entire teaching force has a right to expect equal pay for equal service.

Some say that men give more service in outside activities. Investigation will disprove this. The majority of women teachers spend much time and energy in making successful literary societies, school papers, and entertainments.

I do not argue for all women who become teachers, but for recognition of efficiency. Shall we exclude the long face rod-and-fact women; the woman who takes joy in being drawn by a span of French poodles?

Socrates said: "A teacher must be rich in insight and wisdom, firm of character, kindly in disposition, gentle in manner, quick to praise every excellence, slow to blame any fault, a lover of innocence, beauty and unselfishness; indeed, a man who loves these qualities so much that like a bee hunting for honey in a hollyhock, he comes out covered with their golden pollen."

I confess my sympathies are often with the bee. But is it unjust to wonder if a teacher ought not be paid according to the measure in

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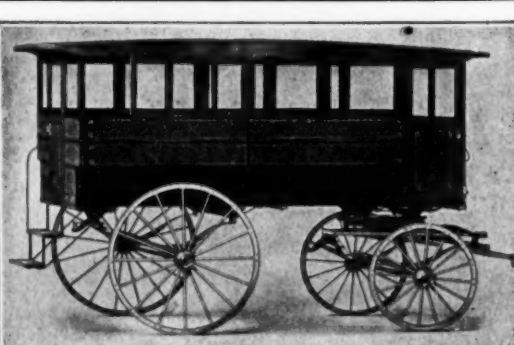
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which he or she attains this ideal of Socrates?

We will not blame the men for the surplus. We shall merely say it is not their fault but their fortune. They are simply the victims of happy circumstances.

This is not merely banter with a bite.

There were three high school boys. Each had three men teachers and one woman teacher: one boy battled with poverty but the desire to stay in school; the second suddenly lost his mother; and the third became influenced by bad companions and was subject to temptations. Each of these boys came to the woman teacher day after day for encouragement, consolation and advice.

Does the school-mother love which makes a boy "dream without becoming a dreamer," help to make a balance for masculine efficiency?

Taunton, Mass. The school has been reorganized on the two-session plan. Sessions begin at 8:05 in the morning and close at 4:53 in the afternoon.

A longer school day, providing for a period of supervised study, has been adopted at Escanaba, Mich. Sessions begin at 8 o'clock in the morning and close at 4 o'clock in the afternoon.

Evansville, Ind. The teachers' training course is to be open to a larger number of students during the next year because of the acquisition of additional accommodations. Students from outside of the city may be enrolled upon the payment of an annual tuition fee of \$50.

Bellefontaine, O. A course in mechanical drawing has been introduced in the high school.



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No, not fallen. How the mighty

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A Perplexing Question.

Prof. C. F. Marvin, head of the United States Weather Bureau, tells in *Lippincott's Magazine* the story of an expedition from the University of Pennsylvania, that was sent to one of the Southern States, some years ago, to observe a solar eclipse.

The day before the event, one of the professors said to an old colored man who was employed in the household where the astronomer was quartered:

"Sam, if you will watch your chickens to-morrow morning, you will find that they'll all go to roost at eleven o'clock."

Sam, as might be expected, was skeptical, but at the appointed hour the heavens were darkened, and the chickens, as foretold, retired to roost. At this the old negro's amazement knew no bounds, and he sought out the man of science.

"Perfessor," said he, "how long ago did you know dem chickens would go to roost?"

"About a year ago," said the professor, with a faint smile.

"Well, ef dat don't beat all!" was Sam's perplexed reply. "Why, perfessor, a year ago dem chickens wa'n't even hatched!"

The pupils of the English class had been studying "The Legend of Sleepy Hollow," and the "Spectre Bridegroom" in Washington Irving's sketch book. The hero of the former is the ungainly schoolmaster, Ichabod Crane. The two maiden aunts of Katrina Van Tassel, the heroine of the "Spectre Bridegroom," are spoken of as "superannuated coquettes."

Teacher—Who in the sketch book is known as a "superannuated coquette?"

Inattentive pupil—Ichabod Crane.

One of the Many.

Neighbor—"They tell me your son is in the college eleven."

Proud Mother—"Yes, indeed."

Neighbor—"Do you know what position he plays?"

Proud Mother—"I ain't sure, but I think he's one of the drawbacks."



Teacher (relating an experience with a tramp): "And then I fainted."

Small boy (excitedly): "Wid yer right, or wid yer left?"—Harpers.

A MAN OF LETTERS.

Elias Lieberman in the New York Times.
When Clegg was young, the first degree He learned to blab was A. B. C.

In adolescence, formally,
A college tagged on him A. B.
Another parchment came his way
That dubbed the stolid grind M. A.
But on he plugged; oh, on plugged he,
Until he nabbed the Ph. D.
In dreams he now began to see
An honorary LL. D.
But then, alas! The end is sad,
For poor old Clegg went raving mad.
Upon the walls incessantly
He scribbles Clegg and X. Y. Z.
And P. D. Q. and Q. E. D.
A literal calamity.

The keepers say he aims to get
A corner on the alphabet.

A New Definition.

A Chicago teacher was explaining the nature and form of squares, cubes, cylinders and finally came to the prism. In reviewing the lesson next day she again held up a prism for identification.

"Now, children," she said, "what is this? I showed you a similar object yesterday."

After a moment of silence a hand shot up.

"Please, I know what it is," came from an overgrown, over-aged boy. "It's a bridewell."

"A what?" gasped the teacher.

"A big bridewell," repeated the boy. "Yesterday you showed us a little one and said it was a prison. This one is the same, only bigger."

A little English boy wrote to his grandmother from his boarding school, in time for her birthday. The letter ran thus:

"Dear Grannie: I want to send you a birthday present, but I haven't any money. So if you will send me the money you always give me for Christmas now, I'll buy you something nice with it. I'm thinking of a pair of pistols a boy here will sell cheap or a gramophone that another boy has. I could use them until I come home."

A Juvenile Logician.

The logical faculty sometimes develops early. For instance, the youngster in the Scotch Sunday-school, told of in the London *Sketch*, could put two and two together perfectly well.

Minister—And how did Noah spend his time in the ark?

Small Boy—Fishin'.

Minister—A vera reasonable suggestion, my laddie.

Small Boy (guardedly)—But he wouldna catch muckle.

Minister (surprised)—What makes ye think that?

Small Boy (knowingly)—Because, ye see, he had only two wir-rms!

"Does a college education help a man in after life?"

"Big leaguers seem to think it makes a man quicker on the bases."

"On the one hand," said the teacher, pointing a long and forbidding finger

at the schoolroom, "we have the far-stretching country of Russia. On the other hand—what do we see on the other hand, Tommy?"

Hazarded the terror-stricken and fore-doomed Tommy: "Warts."

The professor was telling the class in English history of the Elizabethan era. He turned to one of the young men and asked:

"How old was Elizabeth, Mr. Holmes?"

The young man wore a far-away expression.

"Nineteen on her last birthday, sir," came the reply.

The Geography Class.

Question—Mention the three races of men in North America.

Answer—Automobile races, bicycle races and airship races.

Teacher—"Johnny, name some distinguished American who sat on the bench."

Johnny—"Ty Cobb!"—*Life*.

Another Variety.

"Bees are very intelligent," commented the great scientist. "We have reason to believe they can count as high as ten."

"Yes, indeed," added the common person, and I have often heard of the spelling bee."

A Texas educator speaking to the members of a teachers' institute, recently said: "Religion, not science, can explain the mysteries of the universe. The nations of Europe are today applying the doctrine of the 'survival of the fittest' to nations as well as animals. Do you like their methods?"

Hard Work.

The Cook: Why did you quit at Professor Jones'?

The Maid: Well, them high-brows was quarrelling all the time and it kept me running from the keyhole to the dictionary 'till I just got tuckered.

The Professor's Wife.

The professor was absent-minded and his wife was blessed with a lack of tact that frequently brought embarrassment to both. For instance, when the Dean came for dinner, Mrs. Professor recalled her spouse to his duty as host by saying:

"How inattentive you are, John. You must look after the Dean better. He's helping himself to everything!"

Aiming High, But Surely.

The new night watchman at the college had noticed someone using the big telescope. Just then a star fell.

"Begorra," said the watchman, "that fellow sure is a crack shot."

Blind Leading the Blind.

First Stenog—"How do you like your new boss?"

Second Stenog—"Great! He don't know no more about grammar, spellin', and punctuation than I do; he's jest out 'er college!"

Professor at Agricultural School—What kinds of farming are there?

New Student—Extensive, intensive and pre-tensive.

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